

2015

Erie County Municipal Solid Waste Management Plan



Nestor Resources, Inc.

Prepared by the
Erie County
Department of
Planning

Erie County Municipal Solid Waste Management Plan

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INTRODUCTION

Erie County adopted its first Municipal Solid Waste Management Plan under the provisions of the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101) in 1990. It was subsequently updated in 1995 and 2005. This project represents the third update and revision to the original Plan.

This update evaluates the effectiveness of the existing Plan and reviews Erie County's ability to implement the tenets upon which it was originally developed. Based on those findings, certain components have been revised and programs have been altered to complement the current demographics, economy, and resources of Erie County. The Plan outlines the step-wise process from fact finding through analyses to final recommendations. To facilitate implementation of the Plan a table of recommendations and a timeline for expected implementation of each facet is outlined. Some actions are suggested for immediate needs, while others, which require additional efforts and resources will be introduced in transitional phases, and as funds permit.

COUNTY AND MUNICIPAL RESPONSIBILITIES

Prior to Act 101, planning for municipal solid waste management in Pennsylvania had occurred in some fashion for over 40 years. The planning was primarily a function of municipal level government. Some plans were initiated at the county level but only to coordinate the waste management responsibilities of the municipalities. With no statutory powers of enforcement, counties had minimal authority to affect change. Act 101 was the first piece of legislation to transfer the powers and responsibilities for waste management planning to the counties. It also offered counties the ability to delegate those powers and responsibilities to a specific agent, department, or agency. In Erie County, delegation of those duties was assigned to the Department of Planning.

The focus of county level planning was to assure that enough disposal capacity existed to handle the municipal waste generated locally, and allowed counties to control the flow of waste for disposal to designated facilities. It should be noted that certain responsibilities for storage, collection, transportation, and recycling were still largely reserved for the municipalities, if not by Act 101, particularly under PA Municipal Code. Therefore, developing countywide programs and policies to ensure universal access to waste collection remains challenging. Success depends largely on the willingness and cooperation of local municipal officials, and acceptance of the citizens of Erie County.

BENEFITS OF MUNICIPAL WASTE PLANNING

For nearly 25 years, the County has implemented the Plan and its updates with continued success. A number of tangible and substantial accomplishments can be attributed to those efforts. By securing disposal capacity in professionally operated state of the art landfills, the County ensured its citizens fair and equitable disposal costs and

increased protection from future potential environmental liabilities. The combination of mandated and voluntary recycling initiatives conserved valuable natural resources. Active campaigns to collect hard to manage materials has reduced the occurrence of illegal dumping in the County, thus enhancing public health and safety.

ESSENTIAL COMPONENTS OF THE PLAN

The Erie County Municipal Solid Waste Management Plan is the culmination of a series of activities. The planning process is designed to examine existing facts, statistics, and circumstances to project future needs and to determine how to accommodate for them. In solid waste planning these activities traditionally include these exercises:

Waste Characterization

One of the first steps in planning for municipal solid waste management is to identify and understand the sources, types, and quantities of waste that are generated. Since waste generation is typically measured in terms which relate to population and other socio-economic factors, examining trends in local demographics is important. National and regional studies and trends are used to analyze the local reported data and to establish benchmarks.

Available Services and Utilization

Examining municipal solid waste collection programs for residential, commercial, institutional, and government entities can reveal where there is adequate access to services as well as where there are gaps and inadequacies of services. Identifying service providers for collection, processing, and disposal along with the utilization of those services by local citizens is a good step in revealing where poor waste management habits may exist. It is also valuable to explore services that could be made available based on new technologies or new operations.

Potential for Recovery and Diversion

An intense review of reported recycling and waste diversion activities serves as a foundation to determine future projected recovery of materials. It also establishes the potential for future business development opportunities. By creating a baseline, performance objectives and metrics can be developed.

Implementation Strategy

The final component brings together the findings and recommendations of the planning process into an action plan. This is where the resources, tools, and timeframe to achieve the goals of a municipal waste management plan are clearly defined.

All of these elements are organized and arranged in a structure called the implementation plan. It serves as the final documentation of the process and as a guide for future requirements. The outline of the Plan revision is shown in the following figure.

Chapter 1 Description of the Waste

- general demographic data
- current waste stream characteristics
- reported and estimated waste quantities
- material types and sources

Chapter 2 Description of Facilities

- collection and disposal practices
- disposal facilities utilized
- local municipal collection programs

Chapter 3 Future Capacity

- disposal capacity projections
- external influence on available capacity
- determination to solicit for capacity
- provides data on local municipal collection programs

Chapter 4 Description of Recycling

- benchmarks for population, waste generation and reduction
- comparison of local efforts to national trends
- outline of strengths and weaknesses and recommendations for future recovery
- economic and environmental benefits of waste reduction and recycling

Chapter 5 Selection and Justification

- justifications for the strategies to be used to implement a comprehensive waste management system
- modifications to existing programs as well as those newly proposed
- potential business and economic development opportunities
- implementation schedule

Chapter 6 Location of Facilities

- names, locations and types of facilities designated to receive Erie County's waste over the next 10 years

Chapter 7 Implementing Entity

- organizational structure
- basic resources needed by the Department

Chapter 8 Public Function

- county and municipal owned and operated facilities, equipment
- future public facilities

Chapter 9 Implementing Documents

- ordinances
- contracts and agreements
- rules and regulations

Chapter 10 Orderly Extension

- extension and expiration of existing agreements

Chapter 11 Non Interference

- cooperation with existing disposal sites

Chapter 12 Public Participation

- advisory committee meetings
- public comments

CHAPTER ONE

Local Municipal Waste Quantities and Composition

In general, the development of a municipal solid waste management plan comes with the expectation that certain industry standards and assumptions will be utilized to determine the programs and services appropriate to handle the waste generated, recycled, and disposed locally. While those basic tools and data sources are important, conducting research on economic conditions, history, heritage, the people, and their environment is vital in understanding local practices. Local data can point to unique circumstances or materials, which may not fit into the typical trends and solutions and therefore, may require special attention. Knowledge of lifestyles, education, housing, employment, and population also offers insight into the ease or difficulty in implementing potential changes.

This first chapter provides a brief characteristic outline of Erie County and its municipalities. It discusses general demographic features that can influence municipal waste management. The types of municipal waste are described along with the sources and activities where those wastes are generated in Erie County.

AN OVERVIEW OF ERIE COUNTY

Physically, with a land area of 1,558 square miles, Erie County is the largest county in Pennsylvania. It is situated along the most northwestern corner of the state along the shores of Lake Erie, one of the Great

Figure 1-1 Location of Erie County



Lakes. Erie County shares the border along the lake with Canada, the only Pennsylvania County to border another country. Chautauqua County in New York lies to the northeast of Erie County, and Ashtabula County in Ohio is to the west. Within Pennsylvania, Crawford County and Warren County border Erie on the south and east, respectively.

Figure 1-1 shows the County in relationship to the surrounding states and counties.

LOCAL GOVERNMENT

Erie County is governed by home rule charter under the leadership of a county executive. A county council serves as the legislative arm. The City of Erie is the county seat and, by far, the most populated of the thirty-eight municipalities within the County. In fact, it is the fourth largest city in Pennsylvania. The only other city in the County is the City of Corry. Fourteen of the municipalities are boroughs and the remaining twenty-two municipalities are townships.

According to the US Census Bureau, approximately eighty percent of the County's population reside in urban areas. A large majority of the people live in and around the City of Erie, and the Townships of Millcreek, Harborcreek, Fairview, Greene, McKean, North East and Summit. The remainder of the population is distributed relatively evenly except for a few small and densely populated boroughs.

Population and housing density are key factors in determining the types and methods of waste and recycling collection services for an area. It is important to understand how these differ from municipality to municipality. Time, distance, and labor all affect the cost of collecting and transporting materials for disposal and/or processing. Therefore, these issues were considered by the Solid Waste Advisory Committee during the planning process.

Table 1-1 lists the municipalities, their population, the number of occupied housing units and the population density. Figure 1-2 shows the municipalities and the population density of each.

Table 1-1 Erie County Population and Housing by Municipality

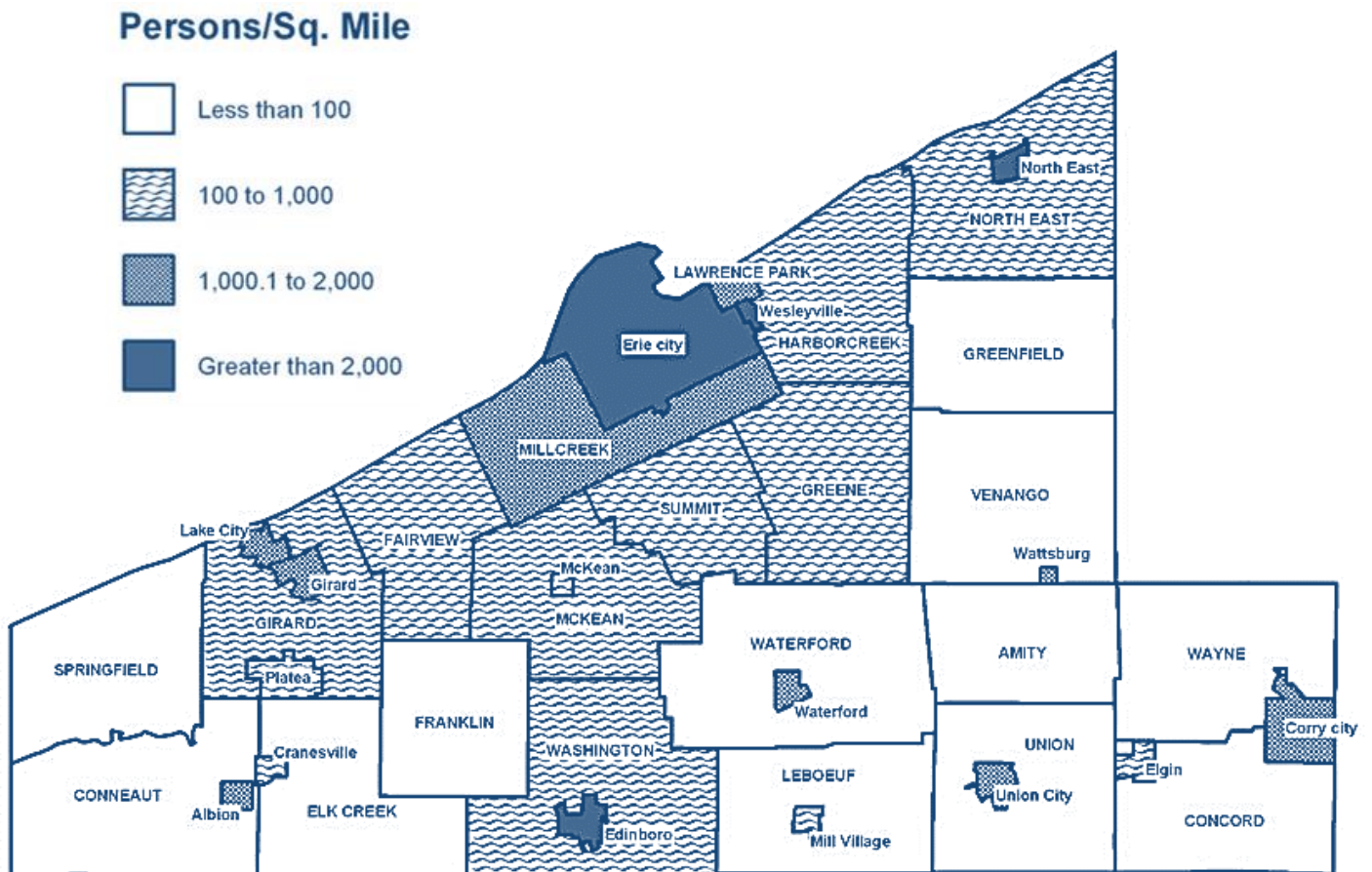
Municipality	Population ¹	Occupied Housing Units ²	Population Density Persons Per Square Mile ²
Albion Borough	1,516	646	1,425.50
Amity Township	1,073	378	40.3
Concord Township	1,344	493	40.5
Conneaut Township	4,290	786	95
Corry City	6,605	2,640	1,037.90
Cranesville Borough	638	241	629.3
Edinboro Borough	6,438	2,125	2,831.90
Elgin Borough	218	78	144.9
Elk Creek Township	1,798	687	51.5
Erie City	101,786	40,913	4,716.30

Table 1-1 Erie County Population and Housing by Municipality (cont'd)

Municipality	Population ¹	Occupied Housing Units ²	Population Density Persons Per Square Mile ²
Fairview Township	10,102	3,814	357.4
Franklin Township	1,633	592	58.2
Girard Borough	3,104	1,296	1,250.60
Girard Township	5,102	2,086	164.9
Greene Township	4,706	1,785	125.3
Greenfield Township	1,933	707	58.5
Harborcreek Township	17,234	6,155	496.1
Lake City Borough	3,031	1,117	1,607.80
Lawrence Park Township	3,982	1,528	1,991.40
LeBoeuf Township	1,698	615	49.2
McKean Borough	388	160	667.2
McKean Township	4,409	1,675	123.6
Mill Village Borough	412	152	1,773.00
Millcreek Township	53,515	22,750	427.5
North East Borough	4,294	1,719	3,204.60
North East Township	6,315	2,443	155.8
Platea Borough	430	157	134.3
Springfield Township	3,425	1,317	85.5
Summit Township	6,603	2,676	264.8
Union Township	1,655	619	44.2
Union City Borough	3,320	1,296	1,762.00
Venango Township	2,297	824	52.7
Washington Township	4,432	1,712	100.6
Waterford Borough	1,517	623	1,167.20
Waterford Township	3,920	1,452	79.3
Wattsburg Borough	403	154	1,048.50
Wayne Township	1,659	644	46
Wesleyville Borough	3,341	1,358	6,266.00

Source: 1. Erie County Dept. of Planning. 2. Penn State Data Center

Figure 1-2 Erie County Population Density by Municipality



Source: US Census Bureau

Erie County has experienced a decline in population since the US Census conducted in 2000. However, the loss is negligible, particularly when compared to other Pennsylvania counties. In fact, while many Erie County municipalities have shown losses, others have continued to grow. A large portion of the influx of new residents into the growing communities is actually comprised of individuals and families relocating from other Erie County municipalities. Approximately 80% of Erie County residents were born, raised, and continue to live there. The overall result has been a relatively stable County population count.

It is common for transplanted residents to bring with them greater expectations for public services than have been traditionally offered in a rural setting. It is just as common for the new residents to have little understanding of the challenges. Distance and travel time have a huge impact on the overall cost of providing waste and recycling collection services. Therefore, understanding these variables is important in developing sustainable and affordable programs to which these transplanted residents have become accustomed.

In communities with a long-standing make-up of the population, it is easier to understand local waste management practices and predict future needs. It can also be more difficult to initiate change, introduce new services, and enforce different policies. Often local governments are ill prepared to deal with these service demands, and the infrastructure for waste and recycling services may not be fully developed. Changes in methods for collection from drop-off to curbside often make sense when convenience and customer satisfaction are concerned. Regionalization and/or coordination of contracted services is a viable solution in many of these scenarios. During the planning process, how these types of conditions may be addressed in Erie County was examined.

ECONOMIC BASE

The location of the County has factored significantly into its history, economy, and the distribution of the population. Lake Erie provides the County with access to the major shipping lanes of the Great Lakes. Both raw materials and manufactured products are shipped through this network and out to sea. Although not as dominant a factor as in the peak of the County's industrial heritage, manufacturing as a whole still represents the greatest source of personal income for local workers. The manufacturing of fabricated metals, machinery, plastics, and rubber products are the total largest sources of personal income in this category. Second in line after manufacturing is total income from health care and social services, while government agencies are third.

Noteworthy to the local economy are the upgrades and resurgence of many ports along the Great Lakes, which in turn have resurrected a demand for shipbuilding and related services in Erie County. After a long economic downturn, these investments bring new purpose to the old shipyards. Because the maritime operation requires a skilled labor force, it has restored stable work and good pay to many Erie County residents.

Access to the major shipping lanes of the Great Lakes continues to influence Erie County's economy.



The amounts and types of municipal waste generated in a community are influenced by the employment status and incomes of local residents. In addition, both the volume of municipal waste and its composition are dependent on the types of businesses, and services that exist. Economic conditions, therefore, must be considered when planning for municipal waste management.

THE ENVIRONMENT



Lake Erie and its beaches, with water sports, wildlife habitats, and the backdrop for major historical reenactments also contribute to the County's growth. Convention and tourism generate substantial revenues. Along with the hospitality industry, arts, entertainment

Protecting Lake Erie and its beaches from littering and illegal dumping is important to the local tourist economy.

and recreational venues, including gambling, benefit from the influx of seasonal visitors.

The lake climate also supports an agricultural economy. Grapes are

currently one of the largest commercial crops grown. With increased grape production, wineries have become more prevalent. An enhanced marketing and distribution system throughout the state has created a growing customer base outside of the local area, which aside from product sales, acts as another tourism attraction.

Proper waste management practices help to maintain the environmental quality of the County, protect its natural resources, and prevent pollution and degradation of local assets. Issues such as illegal dumping, littering and open burning were assessed during the planning process. Minimizing these activities and their consequences was considered an important priority by the Solid Waste Advisory Committee.

MUNICIPAL SOLID WASTE BASICS

Nothing is more common and at the same time more complex than solid waste. There are a number of categories and sub sets of solid waste. In general, the United States Environmental Protection Agency (USEPA) considers discards from residential, commercial, and institutional establishments to be the "municipal" category of solid waste. Ensuring that adequate services are available for the collection, transportation, and disposal of municipal waste is a vital function of local governments. Seeing that materials are diverted from disposal and recovered for recycling or energy production is equally an important responsibility.

IDENTIFYING MUNICIPAL SOLID WASTE

For the most part, municipal waste is recognizable and readily familiar. We produce it where we live, where we work, where we shop, in our schools, in our medical facilities and in a host of other community activities. Municipal waste consists of everyday items such as product packaging, grass clippings, furniture, clothing, bottles, food scraps,

newspapers, appliances, and batteries. However if not managed properly, municipal solid waste can pose public health and safety issues and pollute the environment. Therefore, an extensive set of laws and regulations exist at the national and state level to ensure proper management of solid waste.

The full scope of materials and categories considered municipal waste can become rather complex due to inconsistent definitions and regulatory requirements throughout the nation. Equally complicated is the ability to identify and understand the various sources where it is generated. There are some subsets of the solid waste stream with unique characteristics or which require special handling. USEPA along with many states do not factor these particular types of materials into the overall quantities of municipal waste. In Pennsylvania, however, waste from construction and demolition activities, medical waste from health care facilities, biosolids, and sludges from wastewater treatment all fall within the regulatory framework of municipal solid waste. In the planning process, Pennsylvania counties must address how each of these sub sets is managed.

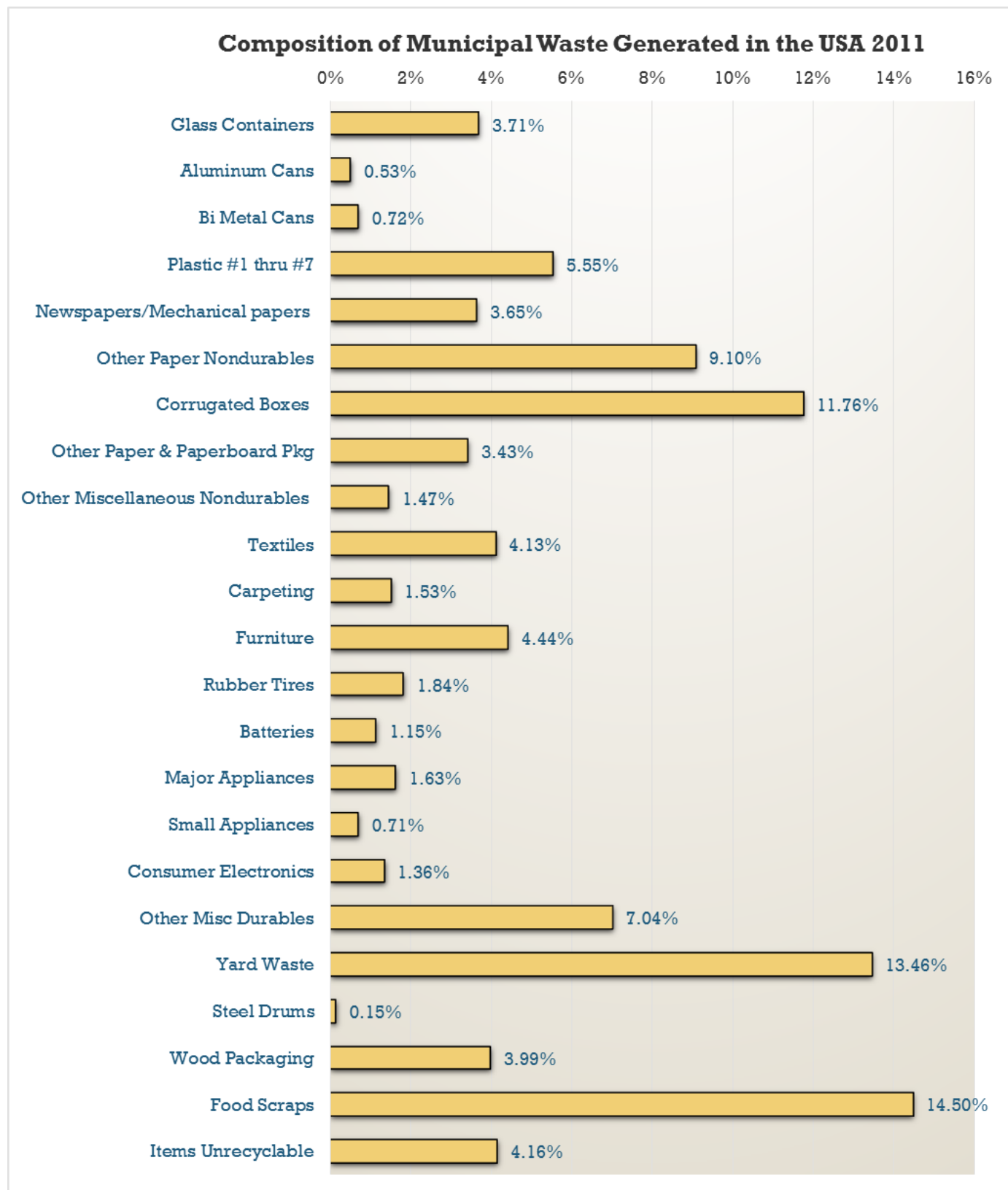
It should be noted that within the Plan, discussions of, and projections for residential and commercial/institutional municipal waste generation and recycling, materials designated as “special handling wastes” are not included. Estimates for these special handling wastes and detailed discussions of how they are managed are provided separately.

MATERIALS AND PRODUCTS FOUND IN MUNICIPAL SOLID WASTE

The United States Environmental Protection Agency has collected and analyzed data on waste generation, disposal, and diversion from 1960 through 2011. Therefore, historic trends and changes, as well as yearly snapshots are available. The Franklin Associates of Kansas were commissioned by the USEPA to conduct this ongoing study and issue a series of publications. It continues to serve as the definitive survey on the characterization and composition of the national waste stream. Until recently, the reports were published as “*Characterization of Municipal Solid Waste in the United States.*” The most current iteration is titled “*Generation, Recycling, and Disposal in the United States: Facts and Figures for 2011.*” These publications are commonly referred to as “The Franklin Study.” The series focuses on municipal solid waste generated by residential and commercial sources. It is a useful tool to make initial assumptions and to reveal significant differences and/or anomalies in local programs based on national behaviors and performance.

Figure 1-3 provides a detailed breakdown of the composition of municipal solid waste in 2011 according to the USEPA. It shows, on a percentage basis, how much each material represents of the total weight of municipal waste generated prior to recovery of materials for recycling and prior to disposal.

Figure 1-3 2011 National Municipal Waste Generated Material Composition 2011 per USEPA



Understanding what is in the waste stream is the first step in determining the best methods for handling and processing various materials, and targeting those that can be recovered for recycling, composting, or to produce energy. Knowing the components of the waste stream also serves to identify how waste might be minimized through product and packaging design, purchasing habits, and greater consideration for reuse and repurposing.

SOURCES AND TYPES OF MUNICIPAL WASTE

It is customary to think that solid waste is categorized in terms of its potential to cause harm to the environment, public health, and safety. While it is a factor, although a certain material may indeed have known hazardous or toxic characteristics, that trait alone is not always the determinant in how a waste is defined or managed under the law. At the federal and state levels it is more common to categorize and regulate waste more by who and where a material is generated than by its actual characteristics or environmental impact. Therefore, materials in solid waste generated in one regulatory defined setting may be managed and controlled under the law differently than when those same items are discarded from another categorized source.

The USEPA definition of municipal solid waste encompasses the materials discarded by residents, commercial businesses, and institutions. It excludes materials generated by manufacturing and industrial activities. A further distinction is made in planning for and managing municipal waste based on whether the source is commercial or residential.

It is important to understand the regulatory and practical basis for categorizing the sources of municipal waste because, while the overall contents of the waste stream remains the same, the proportion of the materials differs in each category. This becomes a major consideration in developing recycling and other waste management technologies and diversion programs. Chapter 4 of the Plan is devoted to a detailed analysis of the specific materials in the waste stream and the sources where they are most likely to be found. This section of Chapter 1 establishes the foundation for that analysis by identifying the various sources of municipal waste in Erie County and the degree which each contributes to the total amount generated.

MUNICIPAL WASTE GENERATORS

Throughout the Plan, municipal waste is discussed in terms of two basic sources or types of generators. These are identified as residential and commercial. Residential sources include single-family detached homes as well as townhouses, condominiums, apartments, mobile home parks, etc. Commercial sources include all types of businesses, offices, government facilities, and institutions. Community events are typically included in this category as well.

Some operations produce specific types of municipal waste that require special handling during transportation and disposal. These include sewage sludge and regulated medical

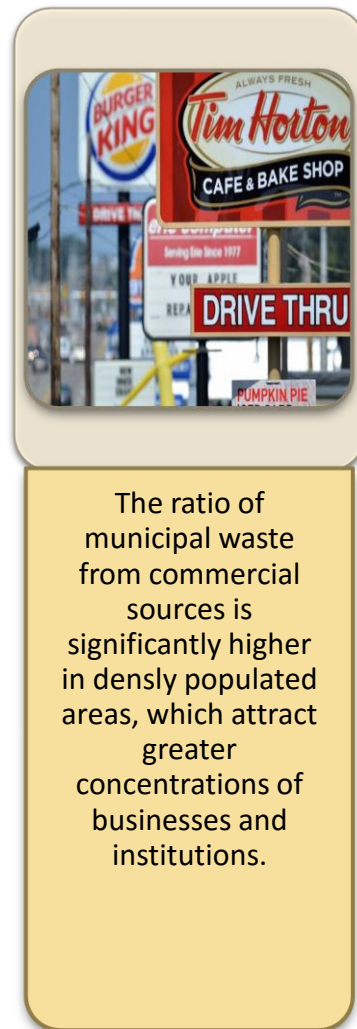
waste. In addition, some waste results directly from construction & demolition activities. Although in these instances commercial sources clearly produce wastes from, wastewater treatment, medical, and construction and demolition activities, because of their unique composition, characteristics, and handling needs, these wastes are considered apart from general commercial waste for planning and management purposes. As mentioned previously, industrial, mining, and manufacturing activities are also excluded from the definition of municipal solid waste generators.

RATIO OF MUNICIPAL WASTE GENERATED BY RESIDENTIAL AND COMMERCIAL SOURCES

According to the USEPA and the Pennsylvania Department of Environmental Protection (PADEP) studies, at least 54% of municipal waste is generated by a community's residents. In rural communities, the studies show the proportion of residential waste to be even higher. The remaining 46% of the general municipal waste stream is the result of commercial activities. Those ratios are safe relative assumptions that can be used when looking at Erie County on a broader spectrum. However, at the municipal level, those proportions can shift significantly, depending on population density and other traits, which define the community as primarily rural or primarily urban.

Brick and mortar commercial establishments need to be established close to their customer base and sources of revenue in order to succeed. In areas with the highest concentration of population, the ratio of municipal waste from commercial sources is slightly higher than the national and state averages and significantly higher than in rural areas where there are more residences than businesses. Consequently, in Erie County, where the population is clustered in the City of Erie and surrounding municipalities like Millcreek, Harborcreek, Fairview, and Summit Townships, it is likely that commercial establishments account for as much as half of the municipal waste generated, if not more. On the other hand in areas like Wayne, Venango, Concord, and Amity Townships, the residential sources could account for as much as 75% of the municipal waste generated in each municipality.

Programs, services, and local ordinances should be geared to the ratio of residential and commercial sources that exist in the community. It doesn't make sense to set recycling goals for materials that are primarily generated by commercial establishments in areas that are predominantly residential. It is worthwhile, however, to leverage the combination of commercial and residential services if it could result in more cost



The ratio of municipal waste from commercial sources is significantly higher in densely populated areas, which attract greater concentrations of businesses and institutions.

effective services for both sources. Rural areas could benefit from the addition of more stops on a collection route to reduce unit costs. Where clusters of small businesses located within urban and suburban neighborhoods operate within conditions too crowded for conventional containers, including them in the residential service offerings can help to boost recycling rates. The differences between residential and commercial availability of services, program participation, and performance were evaluated during the planning process.

RESIDENTIAL PROFILE

As the name implies, residential municipal waste is generated by individuals who reside or live in Erie County. Residential waste is typically collected from the curbside or roadway at the home where it is generated. In some instances, where several households may live in separate units within the same building, the waste from all of the units is placed into a universal container or dumpster. In remote rural areas or where homes are located at the end of long private roadways, conditions may be prohibitive for collection vehicles to provide service. In these areas, residents need to deliver waste to disposal facilities. It is important to know the types of residences that exist in the County to understand the types of services that are feasible in local programs.

In Erie County, the vast majority (65%) of residential generators of municipal waste live in single-family detached housing units.

Mobile homes are another type of detached housing structure, but are accounted for separately. They represent approximately 6% of the total units in the County. Another popular form of housing in Erie County includes those where two and up to four units are attached as a single structure.

Often these units are condominiums, which are owned individually, but maintained under joint service agreements. The other 11% of Erie County units include larger multi-family dwellings. These represent structures with at least five attached units and tend to be apartment rentals. The ratio of housing units is shown in Figure 1-4.

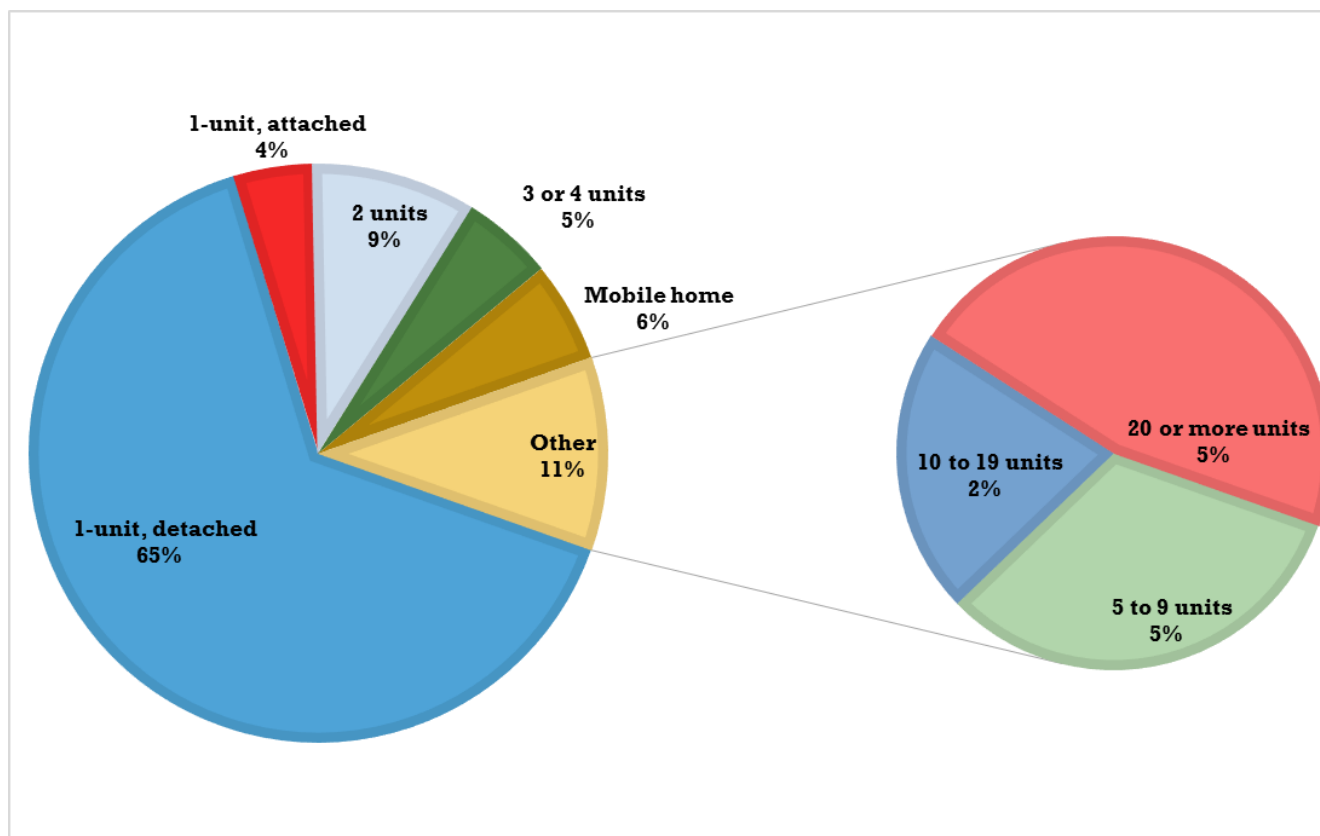


Where single family housing units are densely clustered in one community, or when a greater number of units are guaranteed to participate from joint municipal programs, the result is lower waste collection costs per unit.

From a municipal waste collection perspective, single family detached housing units are advantageous because they are easily accessed and therefore most commonly serviced at the curb. Affordability is an important fact to consider as solutions to expand waste and recycling collection services within the County are explored. Where single family housing units are densely clustered in one community, or when a greater number of units are guaranteed to participate from joint municipal programs, the result is lower

costs. Because the fixed costs of providing service can be distributed among a greater number of units, homeowners experience lower service rates than if each were to negotiate for those services on their own. Many communities in Erie County contract with a single service provider through a competitive bidding process. Private subscription, in which residents arrange for services with the hauler of their choice, is still the most dominant form of waste collection service in the more rural areas of the

Figure 1-4 Erie County Housing Units-Types and Percentages 2008-2012



Source: US Census Bureau

County.

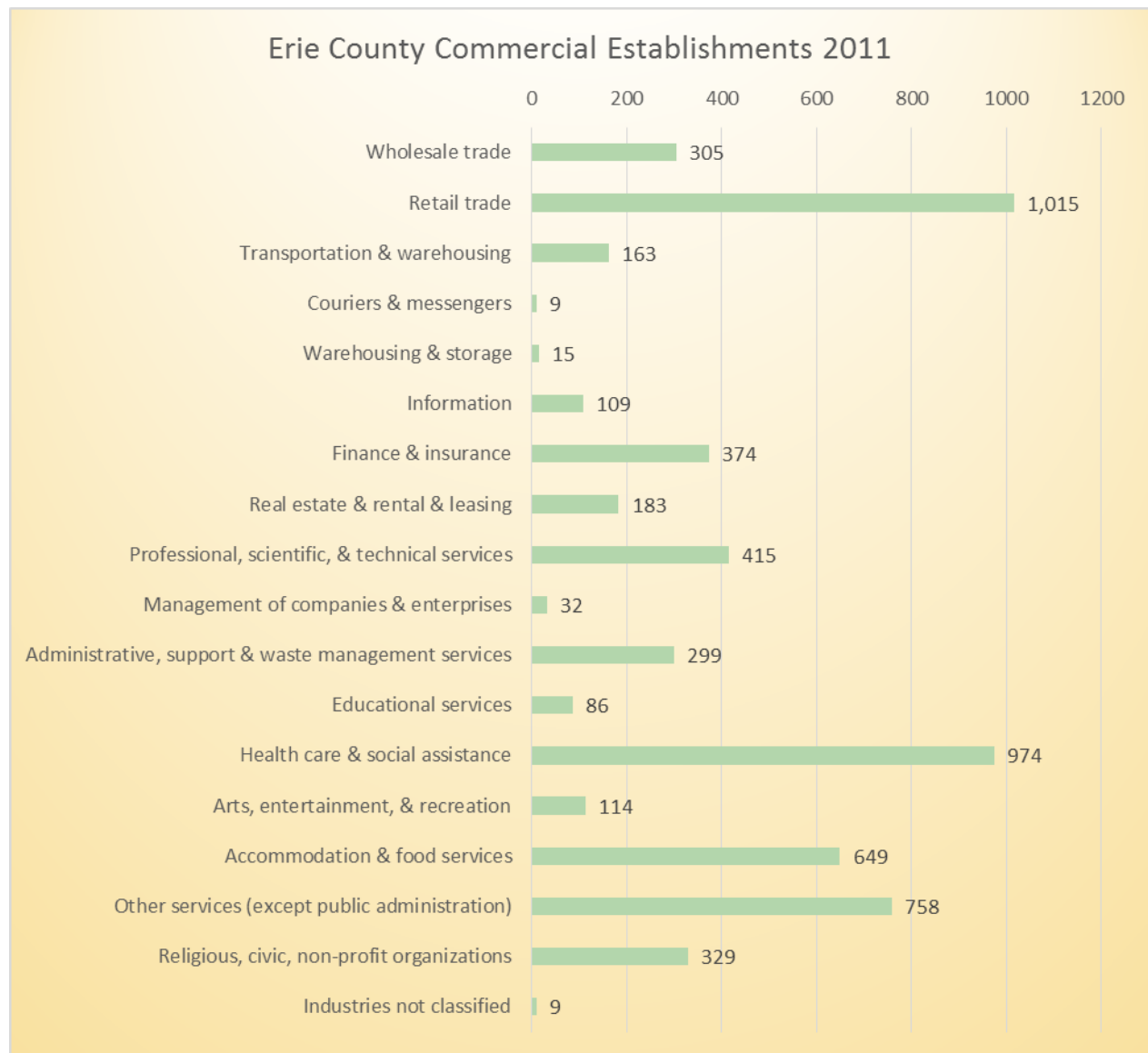
Chapter 2 provides a closer look at the available municipal solid waste infrastructure, reported collection, and disposal activity for all types of municipal waste and a variety of undesirable waste management practices.

COMMERCIAL PROFILE

The number and nature of commercial establishments within Erie County during 2011, according to the U.S. Census Bureau, is shown in Figure 1-5. Employers in the categories of agriculture, mining, manufacturing, utilities, construction, and other

industrial related operations are not considered commercial waste generators under the federal or state municipal solid waste regulations. Therefore, they have been excluded here. The retail trade represents the largest portion of these establishments, followed closely by health care and social services. The impact of tourism in Erie County is evidenced in the high number of hospitality, food, and other service oriented categories that follow in the rankings. Each of these categories are sources of materials that lend themselves to recovery and, thus, where successful commercial recycling programs could be developed. The Solid Waste Advisory Committee considered the need to promote and enforce commercial recycling participation to be of high importance.

Figure 1-5 Types of Commercial Establishments in Erie County 2010



Source: US Census Bureau

Select Types of Commercial Municipal Waste Generators

Aside from retailers, office buildings and other service-oriented businesses there are commercial municipal solid waste generators that are mentioned specifically by category in Act 101. Following is a brief description of each.

Government Facilities

Included in the numbers of commercial establishments are government facilities. Based on the types of government functions, these may be offices, parks and recreational venues, garages and maintenance buildings, retail outlets, and service centers. Municipal and county facilities as well as those of the state and federal government are included. Examples of government agencies that operate facilities located in Erie County include: the US Postal Service, the PA Liquor Control Board, the Veteran's Administration Offices, the Social Security Administration, the PA State Police, state and federal legislators, the PADEP, and correctional facilities.

Educational Institutions

Thirteen major public school districts operate in Erie County. Other learning centers also exist. These include private and charter schools, five colleges, along with other technical and vocational schools. Educational and other institutions are considered commercial waste generators.

Residential Care Facilities

Included in the category of commercial generators of municipal waste sometimes referred to as institutional are skilled nursing, personal care, and assisted living facilities in the County. While these facilities produce municipal waste commonly found in most residences, they also generate materials that require special handling. Due to the nature of their operations, a portion of the municipal waste generated in these facilities falls into a special category of regulated medical waste, previously known as infectious chemotherapeutic waste. These special handling wastes are discussed in the next section.

COMMUNITY EVENTS AND PUBLIC VENUES

Municipal waste is also generated at sporting events, fairs, festivals, and other celebrations. Attendees and vendors produce food scraps, cups, bottles, cans, flyers, boxes, etc. in varying quantities at these community events. Studies have shown that an average of 3 lbs. of waste per attendee per day can be expected for daylong events. However, no precise generation rate would apply to every event or location. Smaller events and venues may have differing quantities. The types of food served, the manner in which beverages are dispensed and the volume of promotional materials also factor into the equation. Recovering recyclables and organic waste from these activities is becoming more common, and in some communities is mandated.

Some examples of the types of events in Erie County where municipal waste is generated and where recycling could occur include a variety of community fairs, arts, crafts and food festivals, the Wine Country Harvest Festival, the Highland Games and Scottish Festival, the Tall Ships Erie Festival, as well as other smaller local community events, including sporting events.



Because of Erie County's outdoor recreational opportunities, it is a tourist destination. In addition to event traffic, the County experiences a steady stream of visitors to its parks, stadiums, and other amusement facilities throughout the year. Therefore, it is important to consider how waste and recyclables are handled at public venues on an ongoing basis. These locations are prone to littering, particularly when waste receptacles are not readily available. Litter prevention was determined to be a high priority by the Solid Waste Advisory Committee.

MUNICIPAL WASTE GENERATION, RECOVERY AND DISPOSAL

It is essential to have a reliable estimate of the quantities of waste generated to ensure that the collection, transportation, processing, and disposal infrastructure is designed to adequately handle the material. Over or underestimating the amounts of waste that will be disposed or recovered for recycling, energy production, or composting could have costly results. Underestimating could cause facilities to be designed with less capacity than needed to manage the inbound material. Overestimating could mean lower than expected revenues from the flow of material needed to support the cost of the operation.

Erie County has been collecting data on municipal waste for over twenty years. Gathering the data is only the first step. Considering the data, finding the key indicators, and understanding what they reveal is something that separates successful plans from those that fall short of their goals. An added security measure is to compare those findings to published data from documented and reliable sources. The Erie County Municipal Solid Waste Management Plan was developed using these techniques.

NOTABLE TRENDS IN THE NATION'S MUNICIPAL WASTE

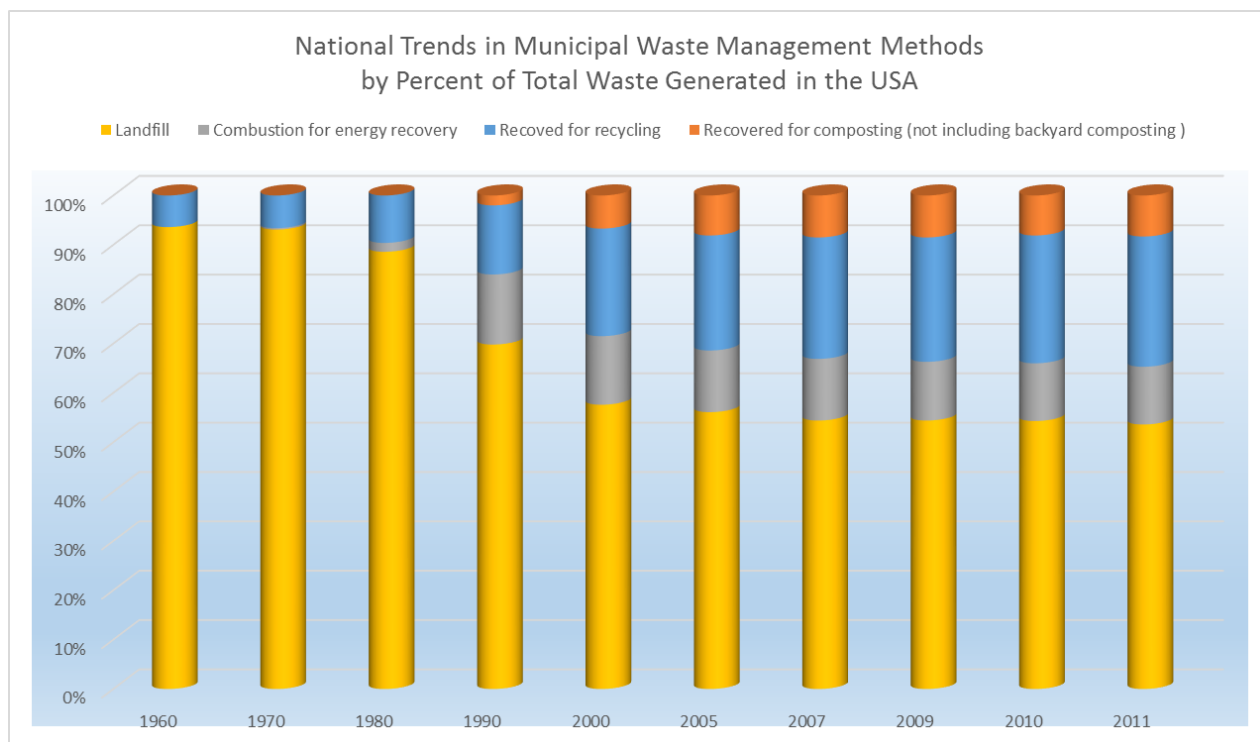
The municipal solid waste stream for a long while has been considered somewhat stable and predictable. In reality, USEPA has documented through its studies that over the past 50 years the quantities, composition, and recovery of municipal solid waste have varied considerably. These same conditions apply to the municipal waste generated in Erie County. Therefore, it is important to reflect on past assumptions to determine if the decisions made in the original Erie County Municipal Solid Waste Management Plan are still valid and appropriate. By comparing national trends to local data, the

County can evaluate where anomalies may exist, and identify program strengths and weaknesses. Finally, understanding historic trends is a good starting point to develop future projections and needs.

IMPACT OF RECYCLING AND OTHER ALTERNATIVES

The dynamics of municipal waste management in 2014 differ from those which the nation first encountered when USEPA began to track this information in 1960. There are fewer and larger waste collection and disposal companies that compete in the marketplace. Recycling is more commonplace and the prevalence of curbside recycling collection is far greater than in the past. The diversion of yard waste and other organic matter from disposal has increased. On a percentage basis, nationally, lesser amounts of the municipal waste generated are currently disposed in landfills than in previous decades, thus extending the available disposal capacity and expected life of these operations. Figure 1-6 illustrates the effect of recycling legislation, similar to Act 101, which was enacted in many states beginning in the 1980's. It also shows the growth of waste to energy facilities and composting operations as an organics management option.

Figure 1-6 Changes in Municipal Waste Management Processing and Disposal since 1960

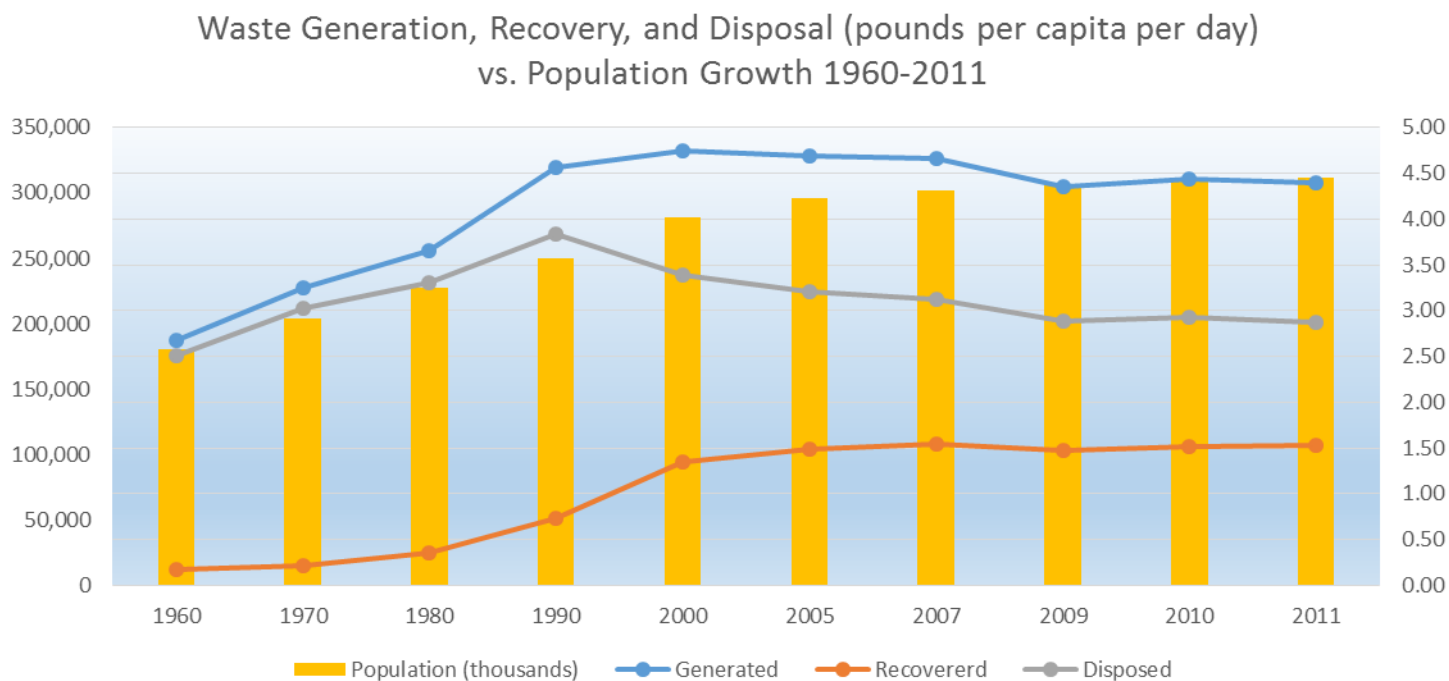


Source: USEPA

A REVERSAL IN HISTORIC WASTE GENERATION TRENDS

Although alternative management options such as recycling and composting have had an effect on the amount of waste landfilled, an even more significant trend is the decrease in the amount of waste produced on a per capita basis. Population has a direct effect on the amount of waste generated in an area and subsequently for which local governments are responsible to plan for and manage. In general, more people means there is more municipal waste to manage. From 1960 to 1990, the amount of municipal solid waste generated in the United States on a per capita basis exceeded the population rate. In 1960, each person in the United States generated approximately 2.68 pounds of municipal solid waste per day. From 1960 to 1990, the per capita rate grew at an accelerated pace to 4.57 pounds per person per day. Since 1990, the per capita rate slowed and then has continued to decline. The 2011 rate is 4.40 pounds per person per day, which is lower than the 1990 rate. Figure 1-7 shows the changes in population and per capita waste generation, recovery, and disposal since 1960.

Figure 1-7 National Changes in Municipal Waste Generation, Recovery, and Disposal



Source: USEPA

CONTEMPORARY MATERIAL MAKE-UP OF MUNICIPAL WASTE

The decrease in the amount of municipal waste generated per person is not due solely to economic conditions, a shift in individual purchasing habits, nor to significant trends

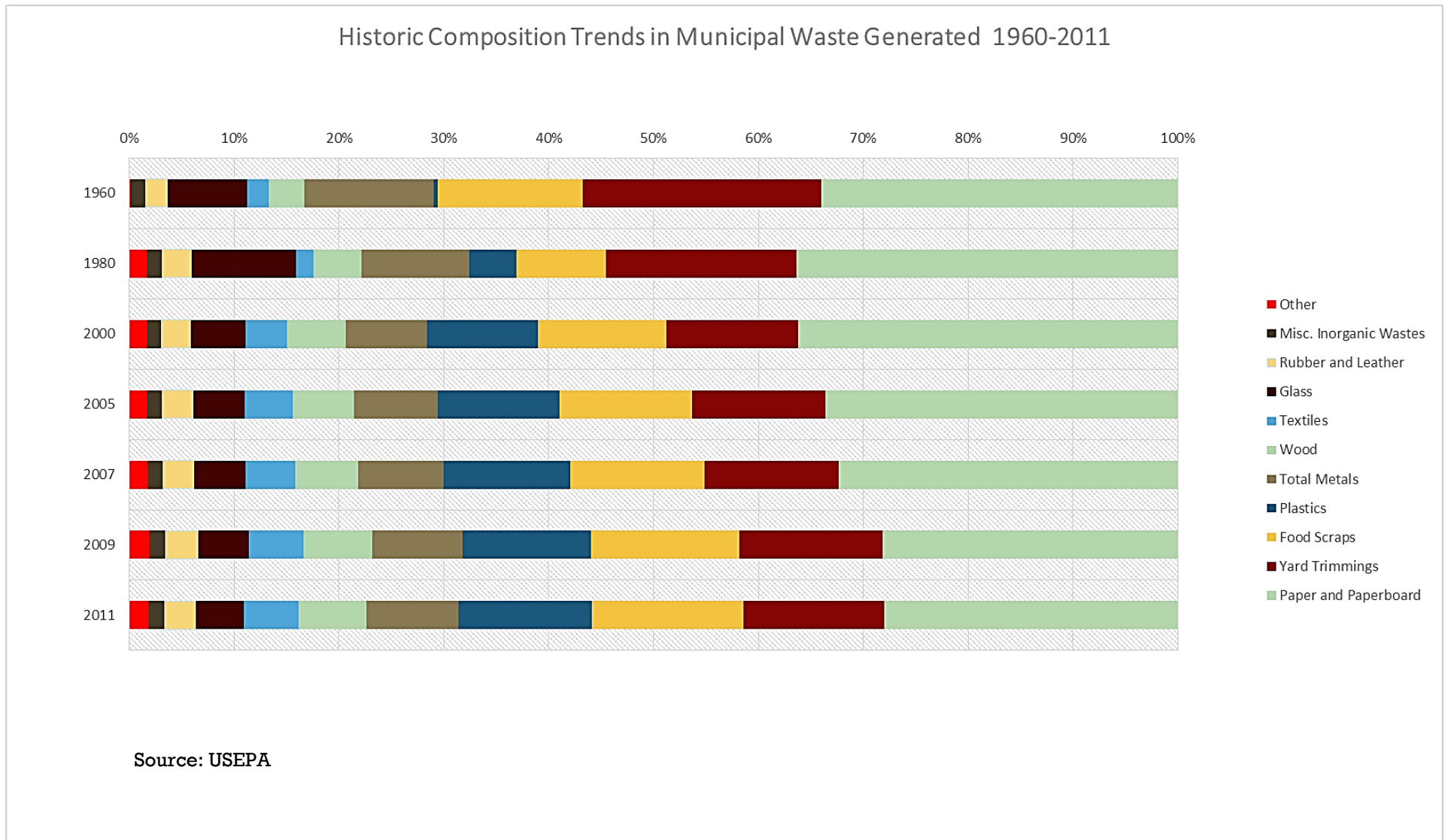
in waste minimization and source reduction. Instead, corporate goals and shareholder demands for greater returns on investment have focused on reducing the cost of energy in the form of transportation and waste.

These objectives have placed increasing burdens on designers to develop products and packaging that use fewer raw materials, consume less storage and transport capacity, are packaged with the minimal requirements to preserve the product, and with packaging that can be reused. The phenomenon is referred to as light-weighting. The intended results are lower fuel costs, more revenue per shelf space, and less waste to manage, even if it is through recycling. To accomplish this, food and beverage containers, including glass, are now thinner and lighter. Many products once sold in glass bottles or jars have now shifted to plastic or aluminum versions. Cardboard boxes have been replaced by shrink wrap. Detergents and other cleaning products have become concentrates sold in containers less than 30% of the former packaging. Another market shift is from printed material to electronic formats. Newspapers, magazines, books, and first class mail items have been replaced by the Internet, e-books, and email. Even the electronic devices used to deliver the news and other communications weigh less in every new iteration.

Interestingly, the shift to plastic may have reduced weight, but it has created another challenge. Low density plastics are greater in volume and consume more storage container and vehicle capacity. This could add to the transportation costs of curbside and drop-off collection programs in some municipal collection programs.

Figure 1-8 shows how the composition of municipal waste has evolved through the years since 1960. The decreases in glass, paper and paperboard, and the increase in plastics is visually evident. Also noticeable is the growing amount of food waste.

Figure 1-8 Evolution of the National Municipal Waste Composition 1960-2011



A review of Erie County's disposal and recycling reports indicate that the County has been experiencing the same changes witnessed nationally. Details of these reports are discussed in more depth in Chapter 2, which covers local disposal practices, and in Chapter 4, which presents the County's recycling programs and performance. However, on a per capita basis, some slight differences were found. None of them deviate enough to warrant concern and may simply be reporting issues. Therefore local data combined with national trends was used to determine the local waste generation, recovery, and disposal figures and to project future needs.

Population is used to calculate the generation, disposal and recovery rates on a per capita basis. It is also used to estimate generation, recovery, and disposal when a per capita rate is assumed. In 2011, the population of the United States was 311.59 million persons. That year the Franklin Study estimated that 250.41 million tons of municipal solid waste as defined by the USEPA was generated in the United States. Of the municipal solid waste generated in 2011, the nation discarded 163.51 million tons. An estimated 86.90 million tons were recovered, establishing for 2011 a national recovery rate of 34.7%. This approximates Pennsylvania's current recycling goal of 35%. Therefore the national data is a reasonable standard to use as a measure of Erie County's reported disposal activities and its performance in attaining the state's recycling goals.

According to the results of the Erie County Department of Planning, the population in Erie County in 2011 was 280,985. In 2011, Pennsylvania landfills reported the disposal of 189,077 tons of municipal solid waste originating in Erie County. Another 57,226 tons of materials designated for recycling in Act 101, including yard waste, were recovered in 2011 according to the County's reports. Thus, based on the reported data, the estimated amount of municipal waste generated in Erie County in 2011 was 246,303 tons.

Figure 1-9 compares the national municipal waste per capita generation, disposal and recovery rates to those calculated from Erie County's reported disposal and recovery tonnages for 2011. As calculated from the reported data, Erie County's per capita generation rate is slightly higher than would be expected if Erie County were to perform the same as the national norms. It also shows a higher disposal rate and a lower rate of recovery. That could indicate that outside waste may mistakenly be attributed to Erie County in local reports. It could also be a sign that recycling activities are not reported by all sources. These scenarios were considered during the planning process.

Figure 1-9 National and Local Reported Generation, Recovery, and Disposal Per Capita Rates 2011

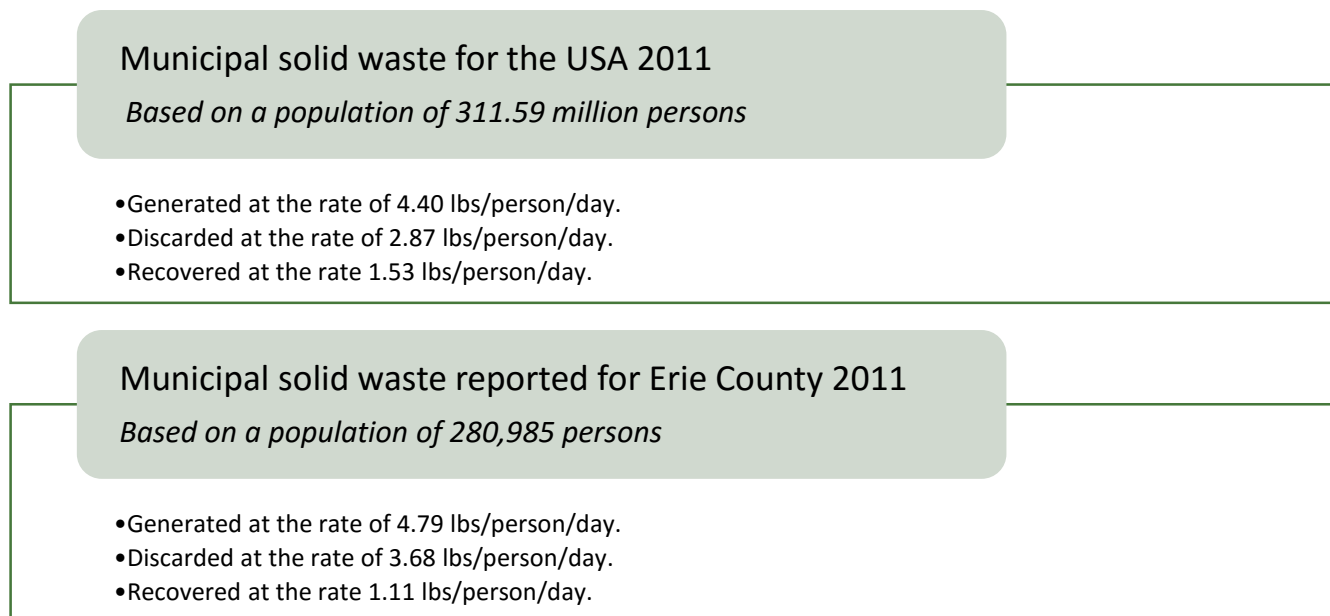
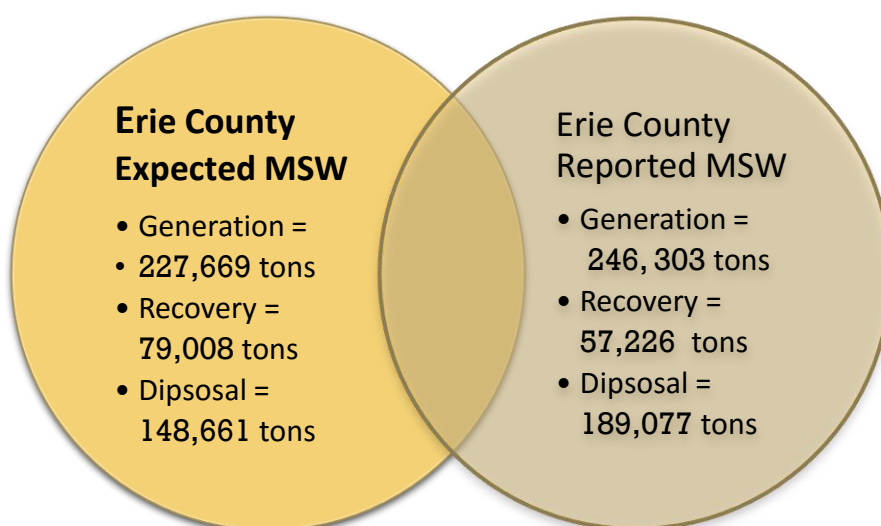


Figure 1-10 shows the 2011 estimated waste generation, recovery, and disposal for Erie County compared to the reported data for the same year. The estimates were calculated using the national waste generation criteria, the estimated 2011 population of 280,985 persons, and assumes the same national level of performance in recovery programs.

Figure 1-10 Erie County Reported and Expected Tons Generated, Disposed, and Recovered 2011



SOLID WASTE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES

Construction and Demolition (C&D) waste is a perfect example of a waste stream that is defined and regulated as municipal waste in Pennsylvania, but viewed differently by USEPA and in other states. Construction and demolition projects in residential, commercial, and industrial establishments generate a highly variable composite waste stream. The name itself suggests the different activities that can occur depending on the specific project or job site. Work may include construction, renovation, and/or demolition and any or all of a number of related activities.

Numerous variables influence C&D waste generation and disposal rates. The amounts of C&D waste from month to month and year to year are less consistent than municipal waste as a whole. On a load-by-load basis, C&D waste can vary dramatically based on the mix of materials and physical characteristics. Demolition projects tend to generate asphalt, concrete, earth, sand, trees, steel, brick, lumber, roofing materials, flooring, plaster, dry wall, and other similar materials. Alternatively, new construction projects generally are comprised of trimmings from dry wall, framing, carpet remnants, etc. Construction and demolition projects are subject to seasonal weather conditions. Swings in the economy can stimulate or deter new development and construction. For all of these reasons, it becomes easier to understand the difficulties in projecting C&D quantities for the long term.

Two studies were recently conducted in the Northeastern United States, for the purpose of characterizing the C&D waste stream and calculating a generation rate. The first study was conducted by the Northeast Waste Management Officials' Association (NEWMOA). The Massachusetts Department of Environmental Protection commissioned the second study. When variables such as definitions of C&D and materials included were filtered, the generation rate of 0.31 tons per person per year seemed to reflect a reasonable median. Asphalt, brick, and concrete (ABC) wastes generated from road and bridge projects are not included in their generation rate calculations, as much of the material from road and bridge projects is used as clean fill on site. Trees and rocks from land clearing and grubbing were also excluded.

ERIE COUNTY REPORTED ACTIVITY

Using the median generation rate of 0.31 tons per person per year derived from the two studies, Erie County would be expected to generate approximately 87,105 tons of C&D waste per year. Another measure to gage the amount of C&D waste generated in Erie County is the ratio of C&D waste compared to the total amount of municipal waste disposed. According to the Pennsylvania Department of Environmental Protection, 17.5% of the material disposed in Pennsylvania landfills can be categorized as C&D waste.

In 2011, according to facility reports, Erie County disposed 35,840 tons of C&D waste in Pennsylvania landfills. Although some data was available for municipal waste that was

disposed in out of state facilities, none of the out of state sites specifically identified any of the waste as originating from C&D activities. This represents approximately 15% of all Erie County municipal waste reportedly disposed in Pennsylvania and out of state facilities combined. Based on Pennsylvania’s averages, the amount of Erie County’s C&D waste reported by the landfills seems reasonable.

There are several explainable reasons for at least a portion of the discrepancy between what the assumptions from the studies and the reported data show. First, much of the brick and concrete, and other masonry materials are utilized as clean fill, similar to the



15% of the total tons of Erie County municipal solid waste disposed in landfills in 2011 was from construction and demolition projects

manner in which state highway projects manage this material. Contractors also reuse doors, windows, hardware, etc. in other project applications. In addition, when loads of C&D waste have some portion of municipal waste components, they are often recorded as municipal waste at the landfill.

Determining an accurate C&D waste generation rate is difficult. However, based on the similarity to Pennsylvania’s averages in Erie County, proximity to a landfill and limited competition in the marketplace may provide a more accurate account of C&D waste management than in other counties where the waste is hauled out of state and to numerous disposal sites.

SPECIAL HANDLING MUNICIPAL WASTE STREAMS AND SOURCES

Certain types of municipal waste have properties or characteristics that require them to be managed in a different fashion or may provide opportunities for enhanced reuse or recycling. The physical nature of the waste may not be appropriate to transport in a conventional collection vehicle. The composition or amounts may present risks to those using traditional collection practices. Therefore, these categories of municipal solid waste are controlled and regulated differently.

SEPTAGE AND SEWAGE

Six wastewater treatment plants (WWTP) service the needs of Erie County communities. Some of the facilities are dedicated to the needs of a single municipality. However, most serve one or more municipalities or portions of municipalities.

Table 1-2 shows each Erie County WWTP and the municipalities within their service area.

Table 1-2 Erie County Wastewater Treatment Facilities

Facility Name	Permit Number
ALBION BORO WASTEWATER TREATMENT PLANT	PA0023124
CORRY WASTEWATER TREATMENT PLANT	PA0028223
EDINBORO MUNICIPAL AUTHORITY	PA0021792
ERIE CITY SEWAGE TREATMENT PLANT	PA0026301
NORTH EAST BORO SEWAGE TREATMENT PLANT	PA0023043
UNION CITY BORO MUNICIPAL AUTHORITY	PA0020605

Where the cost of connecting sewage lines is prohibitive, on-lot septic systems must be installed by private homeowners. Septic systems must be periodically pumped by septic system service companies and the septage is either land applied or transported to a WWTP for treatment. Multi-family dwellings, such as mobile home parks and residential care facilities, as well as industrial operations may operate private pre-treatment systems, with the sewage being transported for final treatment.

Both the raw sewage and septage, which is treated at WWTP's eventually, is dewatered sufficiently to become sewage sludge. These materials require a management outlet. In Erie County, sewage sludge is typically disposed in landfills. Overall, according to landfill reports, approximately 13,731 tons of Erie County sewage sludge were disposed in 2011. No reporting of septage is required. Therefore, the quantities are unknown. However, the companies that transport septage within Erie County are regulated and monitored by PADEP. Thus, it is assumed that these materials are managed adequately. These transporters along with the facilities that accept Erie County sewage sludge for disposal are addressed in Chapter 2.

REGULATED MEDICAL WASTE

Similar to other institutional settings hospitals and resident care facilities generate significant quantities of municipal waste. Much of the material resembles waste found in the hospitality industry, where people are temporarily housed and fed. However, due to the nature of their operations, hospitals and other health care facilities also produce waste, which is required by federal and state regulations to be treated and handled separately from other materials. This waste is identified in Pennsylvania "regulated

medical waste,” and is a direct result of medical procedures, treatments and other activities. Regulated medical waste generated in Erie County is typically transported to commercial treatment facilities, although some onsite treatment remains in larger institutions. Service providers operating within Erie County are identified in Chapter 2.

Typically hospitals generate the bulk of the regulated medical waste, with outpatient care facilities also among the largest sources. However, with an ever-increasing aging population, a growing demand for skilled nursing and resident rehabilitation centers is anticipated. This in turn will increase the amount of waste generated in these facilities.

SUMMARY

The Solid Waste Advisory Committee determined that assuring proper municipal solid waste management is an important and ongoing responsibility of local governments. Their review of local data coupled with comparisons to national trends in waste management offered a sound basis to explore specific programs and services currently implemented, as well as those which may be needed in the future. The Committee recognized that failure to manage municipal waste properly not only harms the environment, but also jeopardizes public health, safety, and the overall quality of life in Erie County. In meeting discussions, opportunities to capture specific components of the waste stream as well as enhance participation from various sectors were reinforced. Recommendations and solutions resulting from the Committee’s discussion, and the findings of the planning process are provided in detail in Chapter 5.

CHAPTER TWO

Municipal Waste Management Infrastructure

To manage the municipal waste that is generated in Erie County requires an intricate network of transporters, processors, and disposal facilities. Evaluating whether or not the available services are adequate to meet the needs of the County is an important step in the planning process. Although the Municipal Waste Planning, Recycling and Waste Reduction Act establishes the assurance of disposal capacity as the priority for counties, understanding these other factors is equally beneficial, if the goal is to establish a comprehensive waste management plan. Knowing to what extent these services are used by Erie County residents and businesses is another critical factor.

Chapter 2 provides an inventory of the facilities, which received waste generated in Erie County. It also examines the disposal trends since the last planning initiative. Additionally, it considers how these trends could impact the availability of disposal capacity in the future. This section explores how waste is managed in local municipalities and discusses the strengths and weaknesses of the current system. It also examines some of the undesirable disposal practices that still occur throughout Erie County, their cause, and methods to discourage this behavior.

COLLECTION AND TRANSPORTATION SERVICES

A number of municipal waste collection and transportation service providers operate in Erie County. Services are offered by the private and public sectors. Some of them are located within the County's boundaries, while others service the County from remote locations. Service offerings may include collection from residential curbside, commercial containers, large detachable open top containers for construction, demolition, and

industrial waste, and enclosed containers for food and other types of organic wastes. Special remediation projects and large demolition jobs generate enough waste to warrant the services of dump trucks or trailers.

The availability of each type of service is dependent on the transporter. Certain transporters specialize and therefore their selection of vehicles and containers are tailored to manage specific types of wastes. Larger companies have the resources to address most, if not all, collection and transportation needs.



TRANSPORTER AUTHORIZATION

In Pennsylvania, certain transporters of municipal and residual waste must obtain Waste Transporter Authorization. Since 2002, all waste transportation vehicles (trucks and truck tractors with a registered gross vehicle weight greater than 17,000 lbs., and trailers with a registered gross vehicle weight greater than 10,000 lbs.) transporting municipal or residual waste to processing or disposal facilities in Pennsylvania have been regulated by the Waste Transportation Safety Act (Act 90). Haulers that transport waste to out of state facilities are not required to obtain authorization. Self-haulers and haulers of small quantities of waste are exempt from the license also.

Table 2-1 lists the transporters of municipal waste known to be operating within Erie County. It is important to note that not only those who collect municipal waste from residences and businesses are required to be licensed, but also those who haul construction demolition debris and significant quantities of materials from their own operations. Therefore, commercial businesses, builders, developers, roofers and remodeling contractors fall into this category. Because they control a significant and important portion of the municipal waste stream, their practices must be considered in policies that result from the planning process.

Table 2-1 Pennsylvania State Authorized Waste Transporters Located in Erie County

AUTHORIZATION ID	TRANSPORTER	CITY	ST	ZIP CODE
WH3305	A.W. Farrell & Son, Inc.	Erie	Pa	16502-1957
WH16542	Alejandro E. Ortiz	Erie	Pa	16502-2125
WH3722	Alex Roofing Co., Inc.	Erie	Pa	16511-1722
WH12677	Amthor Steel, Inc.	Erie	Pa	16503-2429
WH10487	Bauer General Contractors, Inc	Erie	Pa	16511-1901
WH15495	Beacon Construction & Development	Erie	Pa	16510-2524
WH2482	Beute & Bliley, Inc.	Erie	Pa	16511-2829
WH1889	Building Systems, Inc.	Erie	Pa	16509-5169
WH10670	C.D.I.	Erie	Pa	16510-2524
WH13813	Carl Geidel	Erie	Pa	16509-6650
WH6898	Chivers Construction Co., Inc.	Fairview	Pa	16415-1917
WH16413	Christopher A. Harpst	West Springfield	Pa	16443-1009
WH15775	Christopher J. Leslie	Erie	Pa	16501-1528
WH2167	Cindy Glover Trucking, Inc.	Waterford	Pa	16441-8219
WH0570	City Of Erie	Erie	Pa	16503-1873
WH11537	Crenshaw Bros Const Inc	Erie	Pa	16510-2524
WH2982	E. E. Austin & Son, Inc.	Erie	Pa	16503

AUTHORIZATION ID	TRANSPORTER	CITY	ST	ZIP CODE
WH7340	Ed Musgrave Excavating	Union City	Pa	16438-8508
WH15345	Environmental Remediation & Re	Edinboro	Pa	16412-1735
WH4761	Erie Construction, Inc.	Erie	Pa	16510-2552
WH2486	Frank J. Tucci	Edinboro	Pa	16412-1933
WH6733	Harborcreek Township	Harborcreek	Pa	16421-1625
WH11635	Jason P. Gargas	Erie	Pa	16506
WH15597	John F. Sebold	Erie	Pa	16509-3838
WH11237	Kenneth R. Hayes	Edinboro	Pa	16412-3924
WH0468	Keystone Waste Service, Inc.	Erie	Pa	16514-0023
WH0188	Lake City Manufactured Housing	Lake City	Pa	16423-1060
WH16424	Lake Shore Disposal System, In	Erie	Pa	16503-2001
WH13500	Leon Construction	Erie	Pa	16504-2731
WH16386	Lewis B. Start	Edinboro	Pa	16412-9743
WH2793	Lincoln Metal Processing Co.,	Erie	Pa	16505-0127
WH3277	McCormick Structural Systems,	Erie	Pa	16501-1520
WH0029	McCreary Roofing Co., Inc.	Erie	Pa	16503-1561
WH16593	Michael P. Young	Union City	Pa	16438-7958
WH6740	Munsee Brothers Contracting	Corry	Pa	16407-8527
WH11105	Muzyka Builders, Inc.	Fairview	Pa	16415-2314
WH6611	Perry Construction Group, Inc.	Erie	Pa	16502-2203
WH6979	Pro Waste Service, Inc.	Erie	Pa	16503-2147
WH4504	Ray Showman Jr. Excavating, In	Waterford	Pa	16441-0646
WH3605	Rodger E. Niemeyer, Sr.	Wattsburg	Pa	16442-1711
WH0784	Rohrer Trucking, Inc.	Waterford	Pa	16441-3708
WH4792	Ron Vanicek Fabrication & Mach	Girard	Pa	16417-7707
WH14018	Royal Homes Construction And D	Erie	Pa	16510-2524
WH15313	Steven Porter Services, Inc.	Girard	Pa	16417-8758
WH12865	Summit Township	Erie	Pa	16509-5080
WH16382	Suvad J. Aljukic	Erie	Pa	16509-1747
WH2131	U.S. Bulk Transport, Inc.	Erie	Pa	16509-6650
WH1436	Waste Management Of Pa	Ewing	NJ	08628-3200
WH7581	Weaver Trucking	Girard	Pa	16417-9131
WH3095	Wesleyville Borough	Erie	Pa	16510-1813
WH1523	World Resource Recovery System	Erie	Pa	16503-2365

TRANSPORTING SPECIAL HANDLING MUNICIPAL SOLID WASTE

A certain portion of municipal solid waste, which is generated within Erie County, requires specialized methods of transporting, processing, and disposal. These wastes are not typically hauled directly to landfills. In Pennsylvania, transporters of special handling wastes are licensed and regulated separately from the Act 90 Waste Transporter Authorization Program. Often customized equipment is used to deliver these wastes to treatment or pretreatment facilities specifically designed for their management. In some instances, wastes are actually conveyed directly to the facility via pipelines and pumping stations. Special handling wastes include: biosolids, septage, sludges resulting from treated wastewater and regulated medical wastes.

MANAGEMENT OF BIOSOLIDS AND RESIDENTIAL SEPTAGE

An extensive network of wastewater treatment plants has been developed throughout Erie County. Wastewater from residences and businesses flows through pipelines to the treatment facilities. As would be expected, this network services the more densely populated areas of Erie County. The development of such an infrastructure is often cost prohibitive in rural areas where the housing density is low. Rather than flow wastewater to a remote treatment facility, it is held in a septic tank and periodically emptied by a septage transporter. Residential septage can be managed in one of two approved methods. The first option is to transport the septage to a municipal or private wastewater treatment facility or a septage treatment facility where it can be properly treated prior to final disposal. Because facilities within a reasonable driving distance may not be permitted to accept septage, this is not always a viable option. An alternative then is to obtain approval for beneficial use of the septage by land application at an agricultural or reclamation site.

SEPTAGE TRANSPORTERS

In Pennsylvania, transporters of residential septage must register with the PADEP. Information for each load of septage that is collected and transported is recorded by the transporter. Required information includes, at a minimum: the county and state where the waste was collected; the name and address of the hauler transporting the septage; the name and location of the transfer, processing, or disposal facility where the septage has been or will be delivered; the weight or volume of the septage; and a description of any handling problems or emergency disposal activities. Although a report is not filed, the information must be made available upon request to PADEP inspectors.

Septage cleanouts are done on a periodic as needed basis. Therefore, homeowners contact the transporter of choice. It is common for transporters to cross county lines to provide such services. The PADEP can only identify haulers based on their origin, not on their service area. Therefore, many counties also require septage transporters to

register their intent to operate within the county. Erie County does not currently register septage haulers.

Table 2-2 lists those septage haulers known to offer services within Erie County.

Table 2-2 Erie County Transporters of Residential Septage

Septage Transporters in Erie County	
Company	Address
Anthony's Septic Service	9163 Station Rd, Erie, Pa 16510
Don Green Sanitation Service	9191 Tannery Rd, Girard, Pa 16417
Graden Septic Service	2164 Happy Valley Rd, East Springfield, Pa 16411
John Darby's Septic Service	7752 Rohl Rd, North East, Pa 16428
Larry Myers Septic Service	7887 Station Road Erie, Pa 16501
Moore Sanitation Septic Cleaning & Toilet Rental	4064 Nash Rd, East Springfield, Pa 16411
Omni Plumbing & Septic Service	8320 Peach St, Erie, Pa 16509

REGULATED MEDICAL WASTE MANAGEMENT

Transporters of regulated medical waste (formerly known as infectious chemotherapeutic waste) also fall within the ranks of those requiring a license in Pennsylvania. A stipulation of the license is that each transporter must report the origin and ultimate destination of the waste to PADEP. Table 2-3 shows the infectious regulated medical waste transporters that are located in Erie County as well as those that are located elsewhere, but provide services in Erie. Most companies operate within a wide service area, if not the entire state, therefore it is possible that additional companies also service the County.

Table 2-3 Transporters of Regulated Medical Waste Servicing Erie County

Regulated Medical Waste Transporters Operating in Erie County	
Advantra Inc.	4553 Johnston Pkwy Cleveland, OH 44128
Bio-Haz Solutions	531 Seneca Road, Suite 2 Lehighton, Pennsylvania 18235
Bio-Safe North America	11420 Big Creek Ct Painesville, OH 44077
CLYM	310 East Lancaster Road Harmony, PA
Genesis Environmental	380 Locust St McKeesport, PA 15132
Medical Waste Recovery, Inc.	1092 Claridge Elliott Rd. Jeannette PA
MedPro Waste Disposal	1548 Bond St #106 Naperville, IL 60563
Stericycle	342 Robin Hill Dr. Buffalo, NY 14221
Veolia ES Technical Solutions, L.L.C.	1 Eden Lane Flanders, NJ 07836
Waste Management Medical Solutions	851 Robison Road East Erie, PA 16509
Weavertown Transport Leasing Inc	2 Dorrington Rd. Carnegie, PA 15106

RESIDENTIAL COLLECTION PATTERNS AND TRENDS

Waste collection services are available throughout Erie County, although service offerings may vary slightly from town to town. To determine which methods and rate structures were most commonly found in Erie County municipalities, the Erie County Department of Planning conducted a countywide survey. The municipalities were asked to respond via an online survey. As a follow-up some municipalities were contacted directly by phone. Consequently, the response rate was relatively high. The Department was unable to verify current collection practices in less than five percent of the municipalities.

ACCESS TO AND AVAILABILITY OF SERVICE

When compared to the residential trends in many Western Pennsylvania counties, Erie County's survey results were encouraging. A plurality of communities confirmed that there is some type of formal collection program offered within their jurisdiction. Several municipalities secure collection services for their residents through a competitive bidding process. In those communities, a contractual agreement provides one hauler with the exclusive rights to collect residential waste for a fixed period of time. A few

others participate in the marketplace by providing collection services utilizing public employees and equipment. In contrast to these contracted municipalities and those publicly serviced, subscribing to waste collection is voluntary in the remainder of Erie County. In subscription service areas, residents, commercial and institutional establishments are free to contract directly with the hauler of their choice.

An issue often ignored, where participation is voluntary, is that residents and businesses are also free to have no service at all. A negligible amount of residents self-haul their own waste to local facilities. In a few instances where individuals do not subscribe to collection service, the decision may be justifiable by their practice of environmentally friendly waste management methods such as diligent waste minimization, recycling and composting. However, historically, evidence shows that an unwillingness to pay plays a greater role in the avoidance of waste collection than other self-imposed practices.

Based on the survey results, approximately 95% of the municipalities claim that local residents have access to curbside waste collection. Roughly 84% of those communities either arrange for collection service through a competitive bidding process or via public workers and equipment. The other 11%, of the municipalities that responded, indicated that services were available locally on a voluntary subscription basis. It was assumed that the 5% non-responders had no service, however, it is possible that residents there subscribe on a voluntary basis.

RATE STRUCTURES

Because there is one predominant hauler that operates in the County, it is not surprising that the rate structures and services offered are strikingly similar. For the most part, Erie County municipalities continue to offer the collection of unlimited volumes of waste for one flat fee. In a few instances, residents also



The service price per home is higher in communities where subscribing to waste collection is voluntary, than in municipalities that contract with an exclusive service provider.

have the option to opt for the limited volume that can be contained in a 96 gallon wheeled cart. Another choice that may be offered as a stand-alone, or in conjunction with the other options, is a pay by the bag

program. Only one municipality has a volume based system that restricts residents to a certain number of containers or bags for one flat fee. Other services such as recycling, leaf waste, and bulky waste collection may be incorporated into the service agreement. Recycling and leaf waste collection is discussed in detail in Chapter 4.

While the survey did ask for pricing information, it was excluded from the Plan, because comparing collection pricing from one municipality to another can be misleading and inaccurate conclusions can be drawn. There are too many variables that impact the cost from one municipality to another, even when the contract specifications are the same. One finding consistent with other counties was that subscription pricing trends higher than the contract rates in the municipalities with single hauler service agreements. In many cases, more services are included at a lesser price. This is normally because in a voluntary participation system the fixed costs for a collection route must be shared among a fewer number of homes than in a mandatory collection contract. Therefore the per unit rate is more than where services are obtained through an all-inclusive contract.

Table 2-4 Residential Municipal Waste Collection Programs by Municipality

Municipality	Population	% of Population	Population Density	Municipal Contract or Public Employees	Type of waste service offered	PAYT Type	Private subscription	Bulky Waste Collected	Other Collections
Erie County	280566		349.5						
Albion Borough	1516	0.54%	1,425.50	Yes	Unlimited waste flat fee	weekly	NA	Curbside - weekly	NA
Amity Township	1073	0.38%	40.3	No	NA	NA	NA	NA	NA
Concord Township	1344	0.48%	40.5	No	NA	NA	NA	NA	NA
Conneaut Township	4290	1.53%	95	No	NA	NA	NA	NA	NA
Corry City	6605	2.35%	1,037.90	Yes	Unlimited waste flat fee	NA	NA	Curbside - monthly	Tires
Cranesville Borough	638	0.23%	629.3	Yes	Unlimited waste flat fee	NA	NA	Drop-off seasonal - pay per item by weight	NA
Edinboro Borough	6438	2.29%	2,831.90	Yes	Unlimited waste flat fee	NA	NA	Curbside - monthly	curbside-weekly
Elgin Borough	218	0.08%	144.9	Yes	Unlimited waste flat fee	NA	NA	Contractor - as needed by resident	NA
Elk Creek Twp	1798	0.64%	51.5	No	NA	NA	weekly	Drop-off seasonal - free w/waste collection	Freon units @ \$10ea
Erie City	101786	36.28%	4,716.30	public Works	Unlimited waste flat fee	NA	NA	Drop-off seasonal	NA

Municipality	Population	% of Population	Population Density	Municipal Contract or Public Employees	Type of waste service offered	PAYT Type	Private subscription	Bulky Waste Collected	Other Collections
Fairview Twp	10102	3.60%	357.4	Yes	Unlimited waste flat fee	low volume pay/bag	NA	Curbside-weekly	NA
Franklin Twp	1633	0.58%	58.2	No	NA	\$5/bag	WMI	Drop-off seasonal - pay per item by weight	NA
Girard Borough	3104	1.11%	1,250.60	Yes	Unlimited waste flat fee, or w/ 96 gal cart or pay/bag,	weekly	NA	NA	NA
Girard Twp	5102	1.82%	164.9	Yes	Unlimited waste flat fee	NA	NA	Drop-off seasonal - pay per item by weight	white goods, electronics, Freon, tires, metal, HHW - fall
Greene Twp	4706	1.68%	125.3	Public Works for Clean-ups	NA	NA	NA	municipal drop-off white goods	Drop-off/event seasonal
Greenfield Twp	1933	0.69%	58.5	No	NA	NA	NA	Drop-off seasonal	Annual clean-up day
Harborcreek Twp	17234	6.14%	496.1	Yes	96 gal cart or per bag	Extra waste	NA	Drop-off seasonal	WM - At Your Door
Lake City Borough	3031	1.08%	1,607.80	Yes	Unlimited waste flat fee, or w/ 96 gal cart or pay/bag,	NA	NA	NA	NA
Lawrence Park Township	3982	1.42%	1,991.40	Yes	Unlimited waste flat fee	NA	NA	Drop-off seasonal	NA
LeBoeuf Twp	1698	0.61%	49.2	No	NA	NA	NA	NA	NA
McKean Borough	388	0.14%	667.2	No	NA	NA	weekly	NA	NA
Mill Village Borough	4409	1.57%	123.6	No	NA	NA	NA	NA	NA
	412	0.15%	1,773.00	No	NA	NA	NA	NA	NA

Municipality	Population	% of Population	Population Density	Municipal Contract or Public Employees	Type of waste service offered	PAYT Type	Private subscription	Bulky Waste Collected	Other Collections
Millcreek Twp	53515	19.07%	427.5	Yes	Unlimited waste flat fee	\$5 per bag/ minimum purchase required	NA	Curbside - weekly	White goods every other week WM At Your Door
North East Borough	4294	1.53%	3,204.60	Public Works	Unlimited waste flat fee	NA	NA	weekly	electronics
North East Twp	6315	2.25%	155.8	No	Municipal every other week	NA	NA	Drop-off seasonal	NA
Platea Borough	430	0.15%	134.3	Yes	Unlimited waste flat fee	NA	NA	Curbside-weekly	Seasonal
Springfield	3425	1.22%	85.5	No					
Summit Twp	6603	2.35%	264.8	Yes	NA	Bags	weekly	Drop-off seasonal	White goods/electronics Annual Spring
Union Township	1655	0.59%	44.2	No	NA	bags	?	NA	NA
Union City Borough	3320	1.18%	1,762.00	Yes	Unlimited waste/flat fee - monthly fee & pay/bag	NA	NA	municipal drop-off white goods	NA
Venango Twp	2297	0.82%	52.7	No	NA	NA	Yes	NA	NA
Washington Twp	4432	1.58%	100.6	No	NA	NA	NA	Drop-off seasonal - pay per item by weight	NA
Waterford Borough	1517	0.54%	1,167.20	No	NA	NA	NA	Contract	NA
Waterford Twp	3920	1.40%	79.3	No	NA	NA	?		electronics
Wattsburg Borough	403	0.14%	1,048.50	No	Unlimited waste flat fee	NA	WMI	Curbside-monthly	NA
Wayne Twp	1659	0.59%	46	No	NA	NA	?	Tires	
Wesleyville Borough	3341	1.19%	6,266.00	public Works	Limited # bags/cans/ flat rate	NA	NA	muni employees sticker weekly tag	municipal drop-off

PROCESSING AND DISPOSAL SERVICES

To meet its obligation to provide sufficient disposal capacity for the municipal waste generated over the 10-year period of the Plan, in 2005, the County entered into contractual agreements with several landfills. The contracts served as the landfill's guarantee to reserve a specific amount of its daily and annual capacity for the disposal of Erie County municipal waste.

Following is a list of the landfills which either executed the capacity agreements with Erie County, or were approved to enter into an agreement upon the issuance of an operating permit.



ERIE COUNTY DESIGNATED MUNICIPAL WASTE DISPOSAL SITES 2005 THROUGH 2015

Carbon Limestone Landfill

(Mahoning County, OH)
8100 S. Stateline Road
Lowellville, OH 44436

Chautauqua County Landfill

(Chautauqua County, NY)
3889 Towerville Road
Jamestown, NY 14701

County Landfill

(Clarion County, PA)
344 Walley Run Drive
Leeper, PA 16233
Closed in 2008

Greentree Landfill

(Elk County, PA)
635 Toby Road
Kersey, PA 15846

Lakeview Landfill

(Erie County, PA)
851 Robison Road East
Erie, PA 16509

Seneca Landfill

(Butler County, PA)
P.O. Box 1080
Mars, PA 16046

Tri-County Landfill

(Mercer County, PA)
159 TCI Park Drive
Grove City, PA 16127
Permit not issued

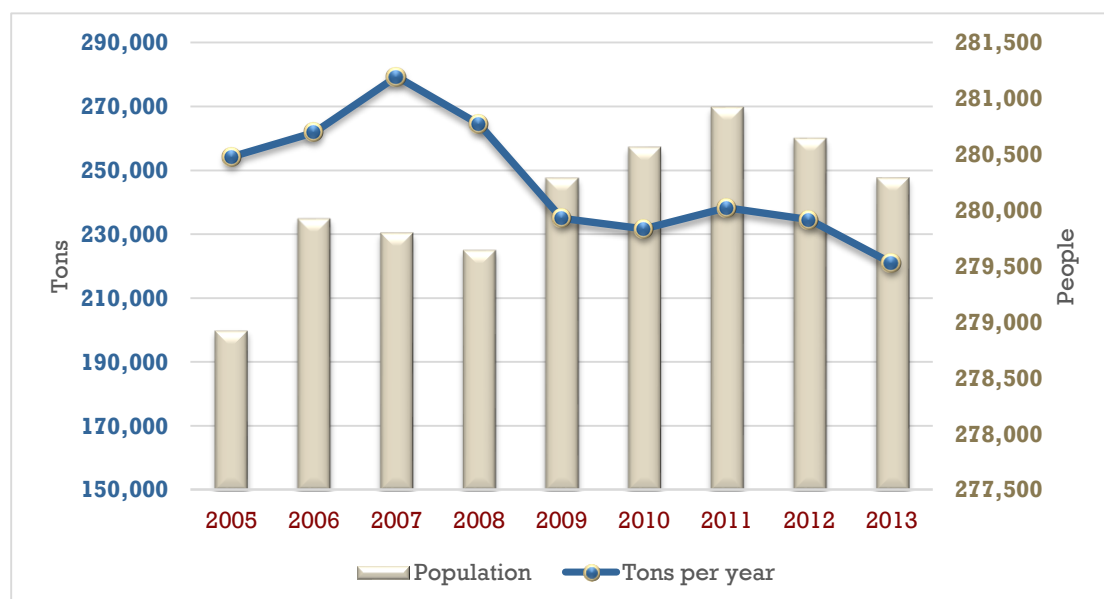
Table 2-5 shows landfills that reported Erie County as the source of the disposed tons of waste listed per year. There is one landfill listed that is not a designated disposal facility. There are also designated disposal facilities that reported no waste from the County and are not shown in the table.

Figure 2-1 illustrates the steady decline in the tons of Erie County all categories of municipal waste disposed since 2005, a difference in nearly 34,000 tons.

Table 2-5 Reported Tons of Erie County Municipal Waste and Disposal Destinations

Year	Total Tons Per Year	SANITARY	LAKE VIEW	SENECA	CARBON LIMESTONE	CHAUTAUQUA	COUNTY ENVIRONMENTAL
2005	254,237.82	8.2	221,925.1	1,206.7	23,443.22	7,654.6	0
2006	261,829.42	1.1	223,261	172.2	15,368.36	22,734.86	291.9
2007	279,330.38	0.7	229,195.7	268.6	15,845.94	34,006.34	13.1
2008	264,465.02	0	211,872	351.4	12,560.88	39,680.74	0
2009	234,987.40	0	203,267.9	42.4	8.3	31,668.8	0
2010	231,619.46	0	195,674.9	205.2	35.39	35,703.97	0
2011	238,303.67	0	205,057.9	232.3	745.36	32,268.11	0
2012	234,527.79	0	191,216.7	226.2	170.4	42,914.49	0
2013	220,949.12	0	176,798.1	174.6	36.47	43,939.95	0

Figure 2-1 Reported Tons of Erie County compared to Population 2005-2013



The USEPA generally defines municipal waste as the day-to-day waste, which we generate in our homes and in commercial and institutional establishments. Pennsylvania differs somewhat from the USEPA definition by including construction and demolition waste, medical waste, ash and sewage sludge under that umbrella. Since Pennsylvania landfills and resource recovery facilities report these municipal waste categories separately, it is easy to see changes and fluctuations in any one

The bulk of the reduction in Erie County appears in the basic form of municipal waste as defined by the USEPA. Construction and demolition waste, medical waste, ash and sewage sludge do show a loss, if one only compares 2005 to 2013. However, these waste streams traditionally do vary from year to year, based on seasonal and operational influences, so in that respect, the average annual deviations are not significant.

Pennsylvania landfills reported 41,220 tons less in 2015 than in 2005. Assuming that the out-of-state landfills reported only USEPA municipal waste, then of the 41,220 loss, approximately 12,878 tons can be attributed to out of state competition for disposal. That leaves a net loss of 28,351 tons per year.

The change in tons disposed is not parallel to the County's population fluctuations. Neither does it mirror the pattern of materials recovered for recycling, nor composting, which is discussed in detail in Chapter 4. The drop however, does mirror the trend seen nationally, and elsewhere in Pennsylvania, for as much as a 27% decrease in tons disposed between 2005 and 2013 and a decrease in the amount of waste disposed per person per day.

Table 2-6 Part of the decrease is due to economic factors, but a significant portion can be attributed to lighter weight materials utilized in containers and other goods and a decrease in packaging for consumer products.

Table 2-6 Trends in Erie County USEPA Municipal Waste Disposal Rates

Year	Reported Tons of USEPA Defined Municipal Waste Disposed Per Year			Population	Pounds Disposed Per Person Per Day
	Pennsylvania	Out-of-State	Total		
2005	181,923	31,098	213,021	278,933	4.18
2006	178,141	38,103	216,244	279,929	4.23
2007	170,243	49,852	220,095	279,804	4.31
2008	161,051	52,242	213,292	279,647	4.18
2009	159,850	31,677	191,527	280,291	3.74
2010	153,801	35,739	189,540	280,566	3.70
2011	151,927	33,013	184,941	280,921	3.61
2012	153,801	43,085	196,885	280,646	3.84
2013	140,693	43,976	184,669	280,294	3.61
Variance	(41,229.90)	12,878.60	(28,351.30)	1,361	(0.57)

CARBON LIMESTONE LANDFILL

Republic Services/Allied Waste's Carbon Limestone Landfill was one of the two out of state disposal facilities designated to accept municipal waste from Erie County. Although the landfill regularly reported between 15,000 and 23,000 tons per year of municipal waste from Erie County from 2005 to 2008, since 2009, Carbon Limestone has reported, for all of those years combined, only 900 total tons. The facility, is located in Mahoning County near Poland, Ohio. Carbon Limestone is a significant operation that accepts waste from surrounding counties in Ohio, West Virginia, and Pennsylvania. It also receives waste from a variety of other states. Although it is not reflected in the reports, it is suspected that more Erie County waste is disposed in Carbon Limestone than is currently reported. This is due to a difference in reporting requirements in Ohio. While the disposal facilities may record the state of origin, there is no requirement for them to track the county or the municipality.

CHAUTAUQUA LANDFILL

Just across the New York state line, near Jamestown is the Chautauqua County Landfill. It is the second out of state facility to enter into an agreement to reserve disposal capacity for Erie County. The documented reports of the amount of Erie County waste, which was disposed at Chautauqua since the agreement was signed in 2004, averages approximately 33,000 tons per year. However, beginning in 2012, those reported tonnages decreased to an average of 5,000 per year.

COUNTY ENVIRONMENTAL LANDFILL

The County Environmental Landfill located in Leeper, Clarion County, at one time had a steady flow of vehicles entering its gates, which delivered waste from sources outside of Pennsylvania. Sometime in 2008, the landfill reached its full capacity. Therefore it stopped receiving waste and began the closure process. Prior to its closure, in 2006 and 2007 the landfill reported small quantities of Erie County municipal waste disposed. However, traditionally, County Landfill was not a regularly selected disposal destination by Erie County transporters.

GREENTREE LANDFILL

Advanced Disposal Services currently owns and operates Greentree Landfill. During the timeframe of the 2004 Plan, the facility was owned by Veolia Environmental Services. The site is located in Fox Township, Elk County. Greentree is one of the largest disposal facilities in the region, and at one time accepted nearly 5,000 tons of waste per day. Although traditionally, the landfill received most of its waste from out-of state sources, currently waste from the Marcellus Shale Gas drilling activities represent a good

portion of its in-bound loads. Advanced Disposal (Veolia Environmental) has never had a division in close proximity to Erie County. Nor does it have a transfer station within the County. Therefore, this facility has never been an attractive option for haulers that must transport waste in small collection vehicles. Consequently, the landfill was a designated facility for disposal capacity in the 2004 Plan, but never received municipal waste for disposal from Erie County.

LAKEVIEW LANDFILL

By far, the dominant disposal destination for all types of Erie County waste was Lakeview Landfill located in Summit Township, Erie County. This facility is owned and operated by Waste Management. Of the tons reported by all sources that originated in Erie County, in any given year, all but approximately 200 to 400 tons were disposed at Lakeview. The location of the facility, coupled with the fact that Waste Management is also the owner and operator of a hauling division and a transfer station within the County, contributes to the amount of waste from Erie County that flows into the facility. Its proximity to the dense clusters of population make Lakeview a convenient disposal destination for other transporters that operate in Erie County, as well.

SENECA LANDFILL

Located in Butler County in the Townships of Jackson and Lancaster, Seneca Landfill is owned and operated by Vogel Holding. Since 2005, Seneca has reported approximately 100 to 200 tons of Erie County waste disposed annually, depending on the year. Seneca receives waste from Erie County through Tri-County Industries, a hauling and transfer station operation located in Mercer County. It is possible that Seneca actually receives more waste from Erie County than is reported. At the receiving landfill, the source of waste that is managed through transfer stations can easily be misidentified as originating in the county in which the transfer station is located, rather than from where it was collected. In addition to Erie, Seneca serves fifteen counties. Allegheny, Butler, and Mercer counties have the greatest quantities of waste reported as disposed at the site.

LOGISTICAL CONCERNS

The impact that collection and transportation have on the cost of managing municipal waste is often overshadowed by disposal in discussions. However, labor, fuel, and equipment represent a significant portion of the cost of waste management. When time and distance can be reduced, transportation costs can be controlled.

To achieve this, municipal waste, which is collected in smaller vehicles designed to maneuver residential streets and commercial roadways, is sometimes delivered to an interim processing facility. There, it is consolidated, compacted, and loaded into large trailers, and in some instances rail cars, to be transferred to the ultimate disposal

destination. Both have the ability to hold larger volumes and weights of materials per trip than the collection vehicles. This reduces the number of trips and, thus, costs.

Although transfer stations are associated with hauls of at least 50 to 100 miles or more, sometimes they can serve a local purpose. Urban areas often use transfer stations to reduce the number of collection vehicles needed to service a town. Because the collection vehicles can unload quicker at a local transfer station than if they delivered the waste the whole way to a landfill when fully loaded, the time saved enables each truck to service more homes per day. Transfer stations that operate in Erie County, or operate in conjunction with transporters that service Erie County, serve both purposes.

Following is a list of those transfer stations.

TRANSFER STATIONS THAT CONSOLIDATE AND TRANSPORT ERIE COUNTY WASTE

Waste Management Transfer Station

1154 West 16th Street
Erie, PA 16502

Tri-County Landfill

159 TCI Park Drive
Grove City, PA 16127

World Resources Recovery Systems

1631 East Avenue
Erie, PA 16503

Avenue A Transfer Station

Avenue A
Corry, PA 16407

Envirofill Transfer Station

1626 Raspberry Street
Erie, PA 16502



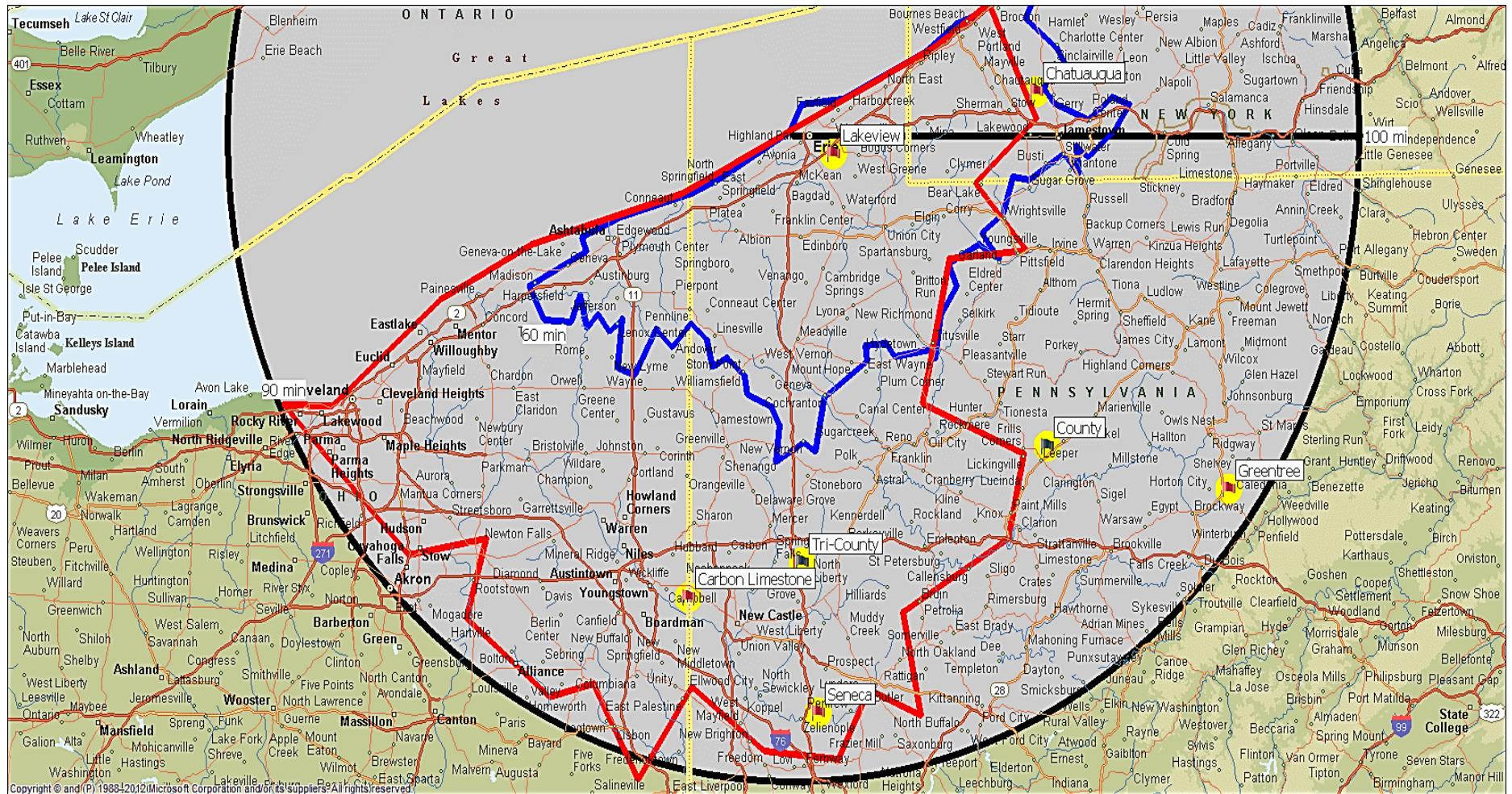
Unloading Waste from Local
Collection Routes



Waste Consolidated into
Trailers and Transferred to
Landfill

Figure 2-2 illustrates the locations of the disposal facilities in relationship to Erie County. The City of Erie was used as a reference point, due to the concentration of population in the area. The map shows a circle which indicates the area included within a 100 mile radius. In addition, both a 60 minute one-way drive time and a 90 minute one-way drive time are shown. Based on the distance to all but LakeView, it is easy to understand why transfer stations play a role in managing parts of Erie County's waste. It also clearly shows why LakeView Landfill is the disposal destination for the majority of the County's waste.

Figure 2-2 Map of Erie County Designated Disposal Sites within 100 Mile Radius



UNACCEPTABLE DISPOSAL PRACTICES

The survey of local municipalities was not comprehensive enough to determine the precise number of Erie County homes that currently use a waste collection service. It did provide a snapshot of where service is widely available to the majority of all households. Other sources of information, however, offer evidence that in certain areas of the County, undesirable disposal behavior, by both individual residents and businesses, is prevalent. The Solid Waste Advisory Committee discussed the impact of these issues on tourism, economic development, and public health and safety. The development of solutions to this situation rose to the surface as one of their priorities. This section discusses these practices and why they are important to consider in the planning process.

ILLEGAL DUMP SITES

For the past decade, Keep Pennsylvania Beautiful (formerly PA CleanWays) has systematically surveyed and cataloged the location and characteristics of the illegal dump sites in Pennsylvania counties. The sixty-seventh and final survey was conducted in 2013. At the conclusion of the study, no county in Pennsylvania was found to be without a considerable number of sites. This includes Erie County.

Questionable disposal behaviors are often inflicted upon rural areas by non-residents. This is particularly true in high traffic tourist and outdoor recreational areas like those found in Erie County. However, equally to blame are local citizens and businesses with disregard for their neighbors and the overall quality of life in the County. The presence of illegal dumps promotes continued dumping.

Erie County was one of the earlier surveys conducted by Keep Pennsylvania Beautiful. It was performed in 2005. Therefore, it is likely that some specific conditions have changed. A number of the dump sites identified in the survey may have been remediated. Likewise, there is an equal chance that new dump sites have been established. Nevertheless, the information in the final report provides a fairly reliable picture of Erie County's illegal dumping "hot spots."

The Keep Pennsylvania Beautiful study identified a total of 83 separate dump sites throughout the County. They are located in twenty of the County's municipalities. The individual sites, overall, were small with estimated waste quantities of 5 tons or less. A few sites were estimated to have as much as 15 tons. Based on the condition of the sites, it was determined that dumping is a continuous occurrence at approximately 33% of these locations. At another 30% of the illegal dump sites, the surveyors were unable to make a definitive determination if the materials were disposed recently. Figure 2-3 shows the location of illegal dumpsites identified in the Keep Pennsylvania Beautiful surveys.

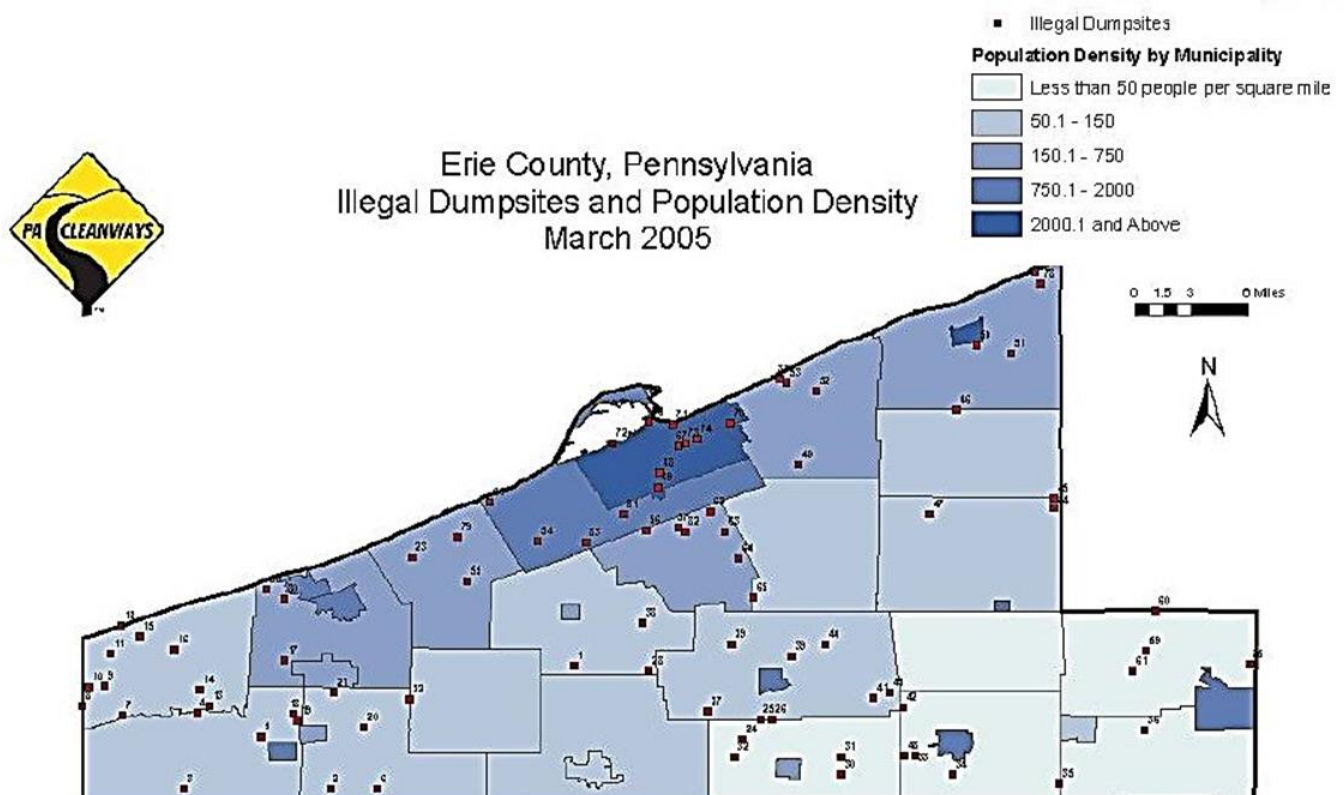


In the most recent past, Erie County residents have faced some difficult economic times. Illegal dumping can occur when people do not place waste management closer to the top of their priority expenditures. Ironically, property owners attempting to avoid waste collection and disposal fees, still pay in the end. Local municipalities bear the cost for cleaning up illegal dump sites. Public works or road crews are often dispatched at significant taxpayer's expense to remove and dispose of discarded items. The cost of cleaning up an illegal dump site, on average, is over \$600 per ton, according to a study done by Keep Pennsylvania Beautiful.

Another source of illegal dumping originates through home remodeling, construction, and demolition activities. Limited controls and reporting requirements decreases the accountability of local remodelers, roofers and other contractors. Lastly, minimal enforcement and prosecution for offenders communicates a certain level of tolerance for the practice. These conditions are the norm in Erie County.

Figure 2-4 shows how local illegal dumping activity relates to population density.

Figure 2-4 Illegal Dumps Sites vs. Population Centers



THEFT OF SERVICE

When unauthorized users place material in another's waste receptacle for disposal it is considered theft of service. Not only do the offenders avoid payment, their waste can result in price increases for the paying customer due to the need for more frequent service or larger containers.

Theft of service is not limited to abuses against businesses and residents. It also occurs when unauthorized waste is left in and around recycling drop-off containers. The waste contaminates the otherwise valuable commodities that residents took time to sort and deliver to the site. Time, labor, fuel, and disposal costs all increase based on the need to continually service the drop-off sites. Excessive costs and the inability to prevent illegal use of a drop-off site are common reasons for abandoning recycling collection programs. Erie County has experienced extensive contamination at many of its drop-off collection points.

LITTERING

Littering can result from limited availability of waste and recycling receptacles in public places. According to some studies conducted on the sources and causes of littering, picnickers, hunters, fishermen, campers, motorists, truck drivers, and construction workers, are prime sources of litter. Those findings indicate that litterers tend to be transient, have less concern for a temporary location, and simply use the most convenient method of disposal regardless of its impact. While those conditions may contribute to the act of littering, there is sufficient evidence to suggest that littering knows no demographic boundaries.

Both motorists and pedestrians litter. Littering differs only slightly from illegal dumping based on the quantities of materials discarded. Even individuals with an awareness that littering is unacceptable allow themselves to dismiss an occasional indiscretion. By failing to acknowledge the cumulative impact of each piece of material disposed carelessly, they disconnect their actions from the resulting environmental and economic damage that occurs.

INTERNATIONAL COASTAL CLEANUP

Volunteers in Erie County participate in the annual International Coastal Cleanup, one of the largest volunteer driven beachfront events of its kind in the world. Although a variety of materials are recovered during the cleanup, in Erie County, volunteers focus considerable efforts on removing cigarette butts. Because Erie County has targeted them, in 2013, Erie County had 16,276 of the



17,344 butts counted in Pennsylvania. Overall, nearly 2,500 pounds of trash were removed from Presque Isle beaches that year. Plastic bags were one of the most frequently found items. Erie County also recorded the most plastic wrappers (3,161) and most plastic bottles collected (1,574) that year.

The revival of Lake Erie from its polluted state during the 1970's and 1980's, is a considerable point of pride for County residents. Ensuring that the Lake remains pristine is vital to the millions of people for whom it is a source of drinking water.



Over 16,000 cigarette butts were removed from Presque Isle in one day

Equally vital to the region is preserving the beaches of Presque Isle, a popular destination for tourists, who support the local economy. According to Keep Pennsylvania Beautiful, Erie County ranked sixth in the nation for the highest number of participating volunteers in 2013.

The need to control the volume of discarded cigarette butts found not only on Presque Isle, but also in downtown Erie and surrounding area, was one of the most discussed issues during the series of Solid Waste Advisory Committee Meetings.

OPEN BURNING

Smoke from any fire can affect the health of a community. The smoke from backyard burning is released close to the ground where people can easily breathe it. Smoke can trigger asthma attacks. People with heart and lung conditions are vulnerable, as are those with other chronic health problems. An often overlooked consequence of backyard burning is that unattended burn barrels can cause accidental fires. Therefore, it poses an immediate as well as a long term danger to the public health and welfare.

Nevertheless, the practice of open burning does exist in Erie County. Most individuals are unaware of the environmental and health issues related to open burning. People burn waste for a variety of reasons. The study, *Open Burning in Rural Northeastern Wisconsin: An Analysis of Potential Air Pollution* examined the motivations and behaviors associated with the burning of waste. Convenience, habit, and the avoided cost of trash collection ranked high on the list.

COMMENTS AND OBSERVATIONS ON ERIE COUNTY'S DISPOSAL PRACTICES

Erie County has a comprehensive collection, transportation, processing, and disposal infrastructure in place. The densely populated areas of the County have taken proper measures to ensure these services are available to their residents and businesses. The majority of Erie County citizens take advantage of these local programs. There are still a remaining few areas of the County where individuals must be made aware of the benefits of participating.

Where undesirable disposal methods are practiced, environmental pollution results. Public health and safety is endangered. In addition, a community can experience lower property values. The cost to cover the expenses of remediating the situation is borne by local municipalities and, of course, the taxpayers. Both the Keep Pennsylvania Beautiful surveys of illegal dumping activity and the International Coastal Cleanups provide visible evidence that unacceptable disposal exists in Erie County.

A countywide municipal cooperative anti-litter campaign coupled with targeted distribution of convenient disposal containers could help alleviate the issue. Funds to purchase public venue containers are often featured in grant programs made available through Keep America Beautiful.

Adoption and enforcement of burning ordinances combined with buy-back programs for the barrels is a beginning in minimizing the practice. Ordinances requiring mandatory waste collection can further reduce it. However, it is important to have the waste collection infrastructure and system in place prior to implementing a ban on burning or an increase in illegal dumping could occur.

Stricter ordinances for waste storage and mandatory collection of municipal waste could significantly reduce illegal dumping by local residents. Convenience centers in tourist and recreational areas could decrease the high volume of waste remaining after summer weekends. Enforcement and prosecution for illegal dumping, in conjunction with public acknowledgement of offenders, has proven to be an effective deterrent.

More detailed and specific recommendations for Erie County, along with a timeline for implementation, are outlined in Chapter 5.

CHAPTER THREE

Future Disposal and Processing Needs

Act 101 specifies that securing long-term disposal capacity is the top priority for Pennsylvania counties during the development of a municipal solid waste management plan. Act 101 also places mandates for recycling on the municipalities in order to decrease the capacity demand by diverting waste material from disposal. Counties are required to seek disposal capacity commitments approximately every ten years or at the time when their commitments for disposal capacity are inadequate to meet their needs.

Counties can demonstrate how sufficient disposal capacity was secured in a number of ways. Erie County has traditionally utilized a contractual agreement with each facility as the legal mechanism to secure disposal capacity. The current agreements will expire beginning in 2015.

In this chapter, Erie County's generation and disposal requirements for the next decade are determined. Projected needs are compared to the rate at which capacity is being consumed at landfills currently receiving the County's waste. Outside influences that could affect the availability of landfill capacity to the County are explored. The need to solicit for future capacity, including potential utilization of alternative methods of disposal and processing is discussed.

PREVAILING CONDITIONS

A review of the existing permitted disposal capacity in the vicinity of northwestern Pennsylvania and the contiguous states of Ohio and New York, shows that the regional supply of landfill space currently exceeds the need for disposal in that same geography. Unless some dramatic changes in the flow of waste into these facilities occurs, it seems safe to expect conditions to remain that way for an extended period, certainly for the duration of the implementation of this revised Plan.

Similar to national trends, Erie County has been disposing less and less municipal waste over the last twenty years. Throughout the region, that tendency is prevalent in other counties. PADEP annual facility reports for a number of recent consecutive years, clearly illustrate a downward drift in tons received for most if not all of the landfills designated in the Erie County Municipal Waste Management Plan. In many cases, the decrease in tonnage has been dramatic.

INFLUENCING FACTORS

The loss of tons disposed in some respects is due to the growth of recycling and composting. The diversion of those materials, which otherwise would have been landfill bound, accounts for only a portion of the discrepancy in what was previously reported

and the current statistics. Waste generation has decreased overall, because of changes in packaging and efficiencies in manufacturing consumer goods. Lighter materials and design improvements have significantly reduced the weight of the products that we purchase. Therefore, there is less to discard, and what is disposed weighs much less.

Many of the landfills in the region relied on large volumes of out of state waste. The cost of transportation, coupled with stiff competition from disposal facilities in other states has all but eliminated the flow of out of state waste into many of these sites. The projected consumption of airspace or capacity used in the design and permitting process for the landfills was much more aggressive than current conditions. Therefore, excess capacity was constructed. Consequently, disposal rates have remained competitive.

COMPETING WASTE STREAMS

Landfills that serve Erie County also accept other types of materials besides municipal waste. Manufacturing and process waste, or residual waste, is one of the most common. A new source of disposal revenue has recently evolved from the drilling activity in the Marcellus Shale Gas Formation. Massive volumes of drill cuttings are currently being disposed in landfills within the tri state area of Ohio, West Virginia, and Pennsylvania. Continued acceptance of this material would accelerate the use of the excess capacity that currently exists.

Catastrophic events at the disposal site or natural disasters, which create large volumes of debris could also impact the amount of space available for the County's municipal waste.

MARKET SHIFTS

Because private sector waste companies prefer to internalize the disposal of waste collected by their own hauling divisions, mergers and acquisitions often have the effect of redirecting waste to or away from disposal facilities. The potential for ownership changes is always present. Another factor to consider is the potential for early termination of an operating permit due to insufficient volumes of waste and revenue to justify an operation.

PROJECTED LANDFILL CAPACITY REQUIREMENTS

The estimated future disposal capacity required for Erie County is based on current reported disposal quantities. The projections allow for possible future changes in the rate of municipal waste generated per capita, and projected changes in population.

POPULATION

Future population estimates were derived from assumptions made in the Erie County Long Range Transportation Plan. The Plan projects population changes through the

year 2040. Issued by the Erie County Planning Department, the projections in the Plan are based on past census data and other factors. The projections are shown on Table 3-1. Over the period 2010 through 2040, the population of Erie County is projected to increase by 3.38%.

Table 3-1 Erie County Population Projections: 2010-2040

	2010	2020	2030	2040	% Change	% Change	% Change
	Census	Projection	Projection	Projection	2010- 2020	2010- 2030	2010- 2040
Totals	280,566	282,495	285,505	290,063	0.69%	1.76%	3.38%

DETERMINING THE FUTURE MUNICIPAL WASTE GENERATION RATE

The USEPA reports on national MSW generation and disposal rates. In recent years, the generation rate per capita has been about 0.85 tons/person/year with little variation. Thus, for projection purposes, it was assumed that per capita generation rates will remain unchanged.

Table 3-2 presents projected disposal capacity requirements for the years 2013 through 2040. The figures are based on a constant per capita generation rate with adjustments due to projected population changes.

SOLICITATION FOR PROJECTED CAPACITY NEEDS

Based on the pending expiration of the existing capacity agreements along with minor uncertainties in future operating capacities at local landfills, Erie County determined that it was in its best interests to solicit for additional capacity. The PADEP was notified of the County's intent to solicit proposals from interested disposal and processing facilities. A formal request was posted in the Pennsylvania Bulletin and was advertised in Waste 360, a national industry trade journal. A copy of the published notification is provided in Appendix A. Results of the procurement process are provided in Chapter 6.

Table 3-2 Projected Landfill Capacity Requirements Erie County

2011 through 2040 in Tons

Year	Population	MSW	Sludge	C&D	Total
2013	281,145	186,268.9	12,507.3	34,075.2	232,851.4
2014	281,338	186,396.7	12,515.9	34,098.6	233,011.2
2015	281,531	186,524.5	12,524.5	34,122.0	233,171.0
2016	281,723	186,652.3	12,533.1	34,145.4	233,330.7
2017	281,916	186,780.1	12,541.6	34,168.7	233,490.5
2018	282,109	186,907.9	12,550.2	34,192.1	233,650.3
2019	282,302	187,035.7	12,558.8	34,215.5	233,810.0
2020	282,495	187,163.5	12,567.4	34,238.9	233,969.8
2021	282,796	187,363.0	12,580.8	34,275.4	234,219.1
2022	283,097	187,562.4	12,594.2	34,311.8	234,468.4
2023	283,398	187,761.8	12,607.6	34,348.3	234,717.7
2024	283,699	187,961.2	12,621.0	34,384.8	234,967.0
2025	284,000	188,160.6	12,634.3	34,421.3	235,216.3
2026	284,301	188,360.1	12,647.7	34,457.8	235,465.6
2027	284,602	188,559.5	12,661.1	34,494.3	235,714.9
2028	284,903	188,758.9	12,674.5	34,530.7	235,964.2
2029	285,204	188,958.3	12,687.9	34,567.2	236,213.5
2030	285,505	189,157.8	12,701.3	34,603.7	236,462.8
2031	285,961	189,459.8	12,721.6	34,658.9	236,840.3
2032	286,417	189,761.7	12,741.9	34,714.2	237,217.8
2033	286,872	190,063.7	12,762.1	34,769.4	237,595.3
2034	287,328	190,365.7	12,782.4	34,824.7	237,972.8
2035	287,784	190,667.7	12,802.7	34,879.9	238,350.3
2036	288,240	190,969.7	12,823.0	34,935.2	238,727.8
2037	288,696	191,271.7	12,843.2	34,990.4	239,105.3
2038	289,151	191,573.6	12,863.5	35,045.6	239,482.8
2039	289,607	191,875.6	12,883.8	35,100.9	239,860.3
2040	290,063	192,177.6	12,904.1	35,156.1	240,237.8

CHAPTER FOUR

Recycling Programs and Performance

The recovery of material for recycling and composting in Erie County is due to the combined efforts of a variety of stakeholders. Many of these initiatives were mandated by state laws and local ordinances. Others were purely voluntary efforts by environmentally conscience individuals. Still others were based on pure economic sense. Whatever the reason, the cumulative effect of these actions is significant. This chapter reviews the waste diversion and recycling accomplishments of the County, the local municipalities and the private sector. The infrastructure and opportunities for composting in Erie County is examined, as well. It also evaluates the effectiveness of local programs as well as the availability of recycling opportunities and outlets throughout the County.

In addition, this chapter addresses recycling's economic and environmental benefits. The reality of the commodities market, and the overall cost of collecting and processing recyclables is included. Business opportunities that could lead to new outlets or methods to enhance participation and increase recovery within the County are discussed

Trends, explanations, and recommendations for future implementation are offered.

REGULATORY COMPLIANCE AND EXPECTATIONS

In Pennsylvania, the expectations for counties and local municipalities to develop municipal waste management and recycling policies and programs are established by the Municipal Waste Planning, Recycling, and Waste Reduction Act (Act 101). The roles and responsibilities differ between each level of government. The Act directs counties to develop local ordinances and enforcement policies for proper waste management.

Under the law, mandates for recycling fall upon municipalities with populations of 10,000 or more, and those with populations of 5,000 or more with a population density of greater than 300 people per square mile. The Act requires these communities to implement mandatory residential curbside collection programs for recyclables and leaf waste. The municipality must also have mechanisms to ensure that commercial, institutional, and government establishments recycle and manage leaf waste accordingly. In addition to the original requirements, mandated communities are subject to recent amendments to the Act resulting from the provisions of Act 140.

ACT 101 AND ACT 140 MUNICIPAL REQUIREMENTS

The responsibilities of communities that meet the population criteria of the Act are direct and straightforward. To ensure compliance by residents and businesses, municipalities meeting the criteria are required to pass ordinances that mandate waste

and recycling collection. Certain services and standards for collection frequency are required. Figure 4-1 lists the requirements for Act 101 mandated municipalities.

Figure 4-1 Act 101 Compliance

To comply with Act 101, mandated municipalities must:	Require, through ordinance, that all residents have waste and recycling service.
	Have an implemented residential recycling program and facilitates a commercial recycling program or participates in a similar county or multi-municipal program.
	Have a residential and business recycling education program.
	Have a program of enforcement that periodically monitors participation, receives complaints and issues warnings for required participants, and provides fines, penalties, or both, in its recycling ordinance.
	Have provisions, participates in a county or multi-municipal program, or facilitates a private sector program for the recycling of special materials.
	Sponsor a program, facilitates a program, or supports an organization to address illegal dumping and/or littering problems.
	Have a person or entity designated as recycling coordinator who is responsible for recycling data collection and reporting recycling program performance in the municipality or municipalities.

The Act allows municipalities choices in how these services can be provided. Municipal employees and equipment can perform the collections or communities can enter into contracts with an outside service provider for these functions. To meet the Act 101 requirements, the PADEP has condoned private subscription service in which homeowner's contract directly with the service provider of their choice, provided that the municipality has a strong monitoring and enforcement program in place.

Provisions of the Act are inclusive of commercial, institutional, and municipal establishments, which are located in mandated municipalities. These entities must recycle and separate leaf waste for composting. The municipality is not required to ensure the service to commercial establishments; however, they are expected to enforce the mandate.

MUNICIPAL RECYCLING PROGRAMS

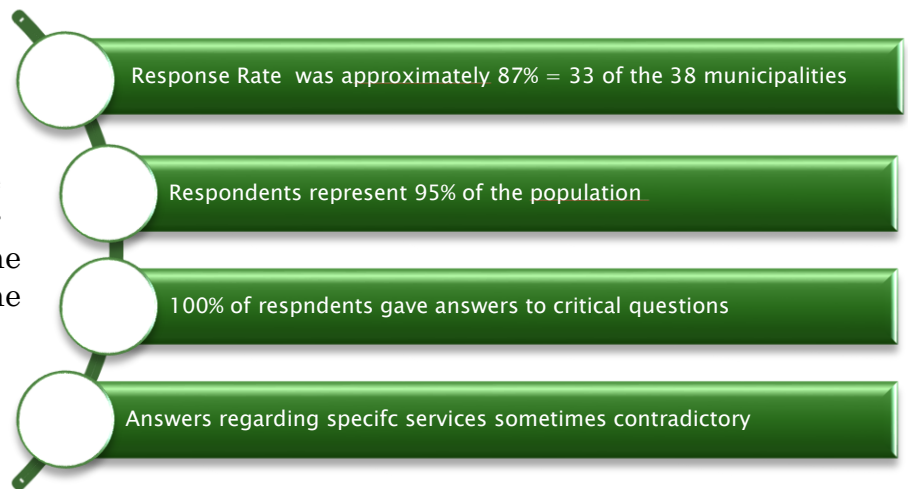
In 2014, the Department of Planning conducted a comprehensive survey of Erie County municipalities to assess the status of and criteria for waste and recycling collection practices in each community. The response rate was high, as shown in Figure 4-2, and therefore, the information provided is useful in establishing trends across the County.

Six municipalities in Erie County meet the Act 101 criteria to implement programs for mandatory recycling by residents and commercial establishments.

Opportunities are available to recycle in other communities. However, at the County level and in the remaining municipalities, the recycling programs and activities that are implemented are not required by law. Because

eligibility for grant funding available through Act 101 Section 902 and 904 is dependent on compliance with most of the provisions of the Act, many of these non-mandated municipalities may have local ordinances that mirror state requirements.

Figure 4-2 Validity of Municipal Surveys



CURRENT CONDITIONS

The results of the municipal services survey showed that residents in nineteen (19) municipalities have access to some type of municipal collection program that is either implemented under a contractual arrangement with a private service provider or by municipal employees. Recycling is typically provided in conjunction with weekly waste collection services. Residents in the remaining nineteen (19) municipalities rely on drop-off collection points provided by the County, by the municipality, or may have no service at all. In a few instances, local haulers offer recycling collection as part of their subscription service.

At a glance, it would be easy to make the assumption that half of the County does not have access to recycling services. That is a valid perception when only the number of municipalities are considered. However, an evaluation, which is based strictly on the number of municipalities, does not readily show the actual portion of the population

that has access to recycling opportunities. When the number of residents is considered, Erie County fares much better in recycling availability.

The survey showed that 89.45% of the County’s residents live in municipalities where the opportunity to recycle exists. Even more impressive, only 4% of those who have access to recycling rely strictly on drop-off collection services, the remainder are serviced at the curbside. Overall, 83.26% of the population receives curbside recycling collection either by municipal employees or a third party municipal contractor. Another 2.23% have curbside recycling collection through a subscription service.

Looking at the municipalities that do have curbside recycling collection services reveals another important similarity. Unlike the areas that do not have service, these municipalities with recycling programs, have the highest clusters of population in the County, on average. Housing and population density are important factors in providing



Over 85% of Erie County’s residents live in municipalities where curbside recycling collection is available.

productive and cost effective collection service. They reduce the time and distance between service stops and therefore, increase fuel efficiency as the cost of labor decreases. All of this trickles down to the customer in the form of more affordable service rates. In Erie County, the average population density where curbside services are prevalent is 1006 persons per square

mile. Conversely, the municipalities where only 15% of the population resides and recycling services do not exist; the density is only 302 persons per square mile.

Based on those factors, it’s easy to see why curbside collection has spread in certain areas of Erie County, while in others, it remains a challenge. Figure 4-3 shows the municipalities with curbside recycling programs. The visual confirms how the saturation of population complements the availability of services. The map also illustrates how misleading it can be to rely on only the number of municipalities with services, rather than where the majority of people reside.

Table 4-1 shows Erie County’s municipalities. It indicates how materials are collected for recycling in each municipality. Similar information is shown for yard and leaf waste collection services. The table illustrates whether the municipality must comply with the mandates of Act 101 to recycle, or whether the municipality initiated its program voluntarily. The types of ordinances related to municipal solid waste management that have been adopted by the municipality are shown, as well.

Figure 4-3 Saturation of recycling collection programs in Erie County

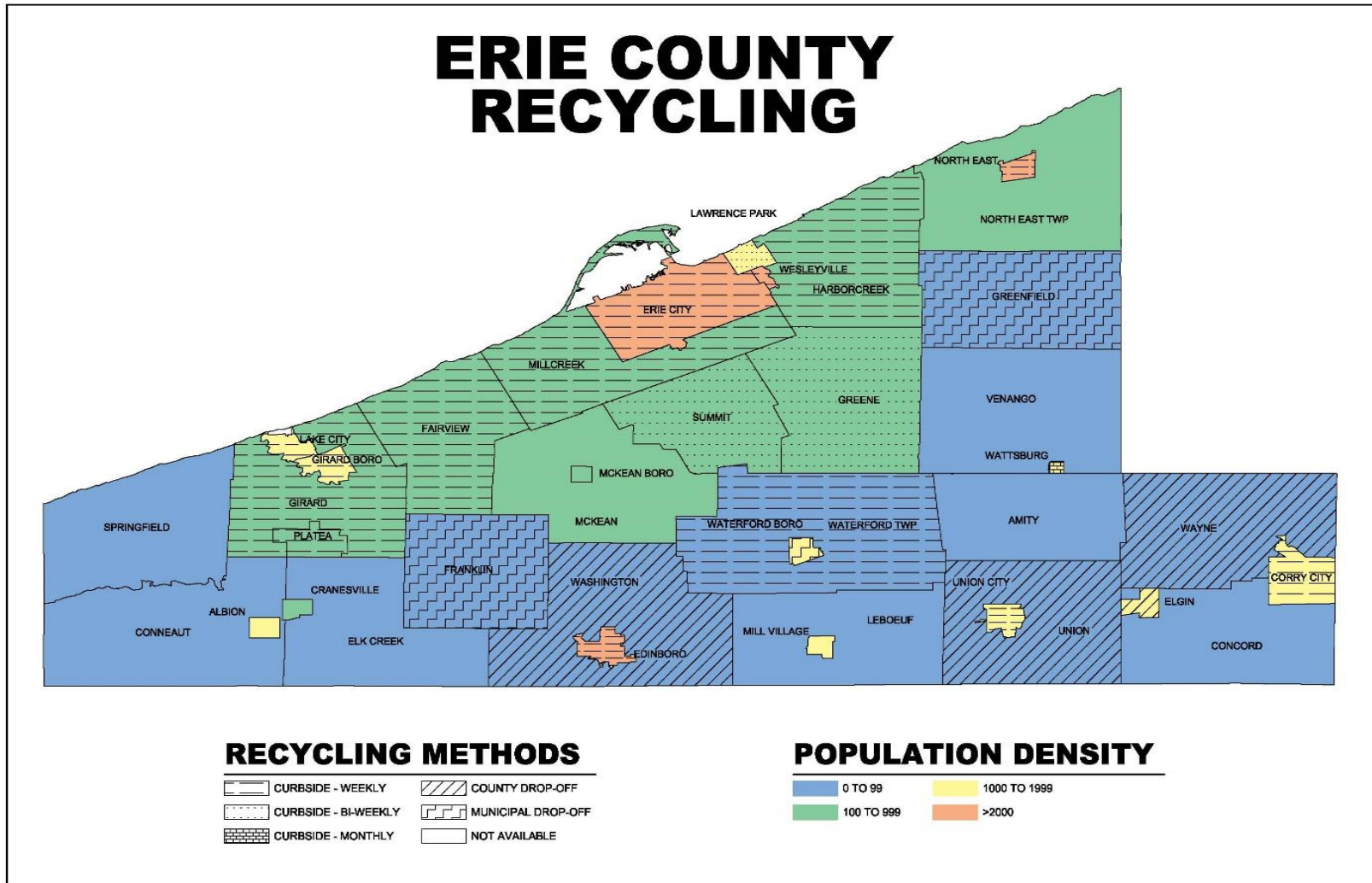


Table 4-1 Erie County Municipal Recycling and Yard Waste Collection Programs						
Municipality	Mandated by Act 101 or only by Local Ordinance	Waste Management Related Ordinances	Recycling Serviced by Contract, Open Subscription, or Public Workers	Residential Recycling Method and Frequency Collected	Yard Waste Serviced by Contract, Open Subscription, or Public Workers	Leaf & Yard Waste Method and Frequency Collected
Ordinances : 1=mandatory waste, 2=mandatory recycling, 3=haulers must provide recycling to all customers, 4=open burning ban, 5=illegal dumping, 6=recycling mandated by Act 101, 7= accumulation of waste, 8=recycling is voluntary						
Albion Borough	NA	4, 5	Contract	NA	Municipal employees	Curbside Weekly
Amity Township	NA	7	NA	NA	NA	NA
Concord Township	NA		NA	NA	NA	NA
Conneaut Township	NA		NA	NA	NA	NA
Corry City	Act 101	1, 2, 3, 4, 5, 6, 7	Contract	Curbside Weekly	Municipal employees	Seasonal
Cranesville Borough		1, 5, 7	Contract	NA	NA	NA
Edinboro Borough	Act 101	1, 2, 3, 4, 6, 7	Contract	Curbside Weekly	Municipal employees	Seasonal
Elgin Borough	NA	1, 4	Contract	County drop-off	NA	NA
Elk Creek Township		4	NA	NA	NA	NA
Erie City	Act 101	1, 2, 3, 4, 5, 6	Municipal employees	Curbside Weekly	Municipal employees	Curbside Weekly
Fairview Township	Act 101	1, 2, 4, 6	Contract	Curbside Weekly	Municipal employees	Seasonal
Franklin Township				Municipal drop-off	NA	NA
Girard Borough	Local Ordinance	3, 4, 5	Contract	Curbside Weekly		Seasonal
Girard Township		5	Contract	Curbside - Weekly		Seasonal
Greene Township		8	Municipal employees	Curbside every other week	NA	NA
Greenfield Township		4, 5	Subscription	Municipal	NA	NA
Harborcreek Township	Act 101	1, 2, 5	Contract	Curbside Weekly	Contract	Curbside weekly + daily drop-off

Municipality	Mandated by Act 101 or only by Local Ordinance	Waste Management Related Ordinances	Recycling Serviced by Contract, Open Subscription, or Public Workers	Residential Recycling Method and Frequency Collected	Yard Waste Serviced by Contract, Open Subscription, or Public Workers	Leaf & Yard Waste Method and Frequency Collected
Lake City Borough		4, 5, 7, 8	Contract	Curbside Weekly	NA	NA
Lawrence Park Township.		1, 4, 5, 8	Contract	Curbside every other week	Contract	Weekly
LeBoeuf Township	NA		NA	NA	NA	NA
McKean Borough	NA	4	NA	NA	NA	NA
McKean Township.	NA		NA	NA	NA	NA
Mill Village Borough	NA		NA	NA	NA	NA
Millcreek Township	Act 101	1, 2, 3, 4, 5, 6, 7	Contract	Curbside Weekly Municipal drop-off		Curbside-weekly, drop-off daily
North East Borough	Local Ordinance	1, 3, 4, 5, 7	Municipal employees	Curbside Weekly	Municipal employees	Curbside Weekly
North East Township	NA	5	Subscription	NA		Drop-off all year
Platea Borough		3, 4, 5, 7, 8	Contract	Curbside Weekly		Seasonal
Springfield Township.	NA		Subscription		NA	NA
Summit Township	Local Ordinance	1, 2, 3, 4, 5, 6, 7	Contract	Curbside Biweekly	NA	NA
Union Township	NA	4, 5, 7, 8	NA	County drop-off	NA	NA
Union City Borough	Local Ordinance	1, 3, 5, 7, 8	Contract	Curbside Weekly	Municipal employees	Weekly
Venango Township	NA	4, 5, 7	NA	NA	NA	NA
Washington Township	NA	4,5	NA	County drop-off	NA	NA
Waterford Borough	NA	5, 8		Municipal drop-off	Municipal employees	Seasonal
Waterford Township	NA	NA	Subscription	Curbside Weekly	NA	NA
Wattsburg Borough	NA		Subscription	Curbside Monthly		Monthly
Wayne Township	NA		Subscription	County drop-off	NA	NA
Wesleyville Borough	Local Ordinance	1, 2, 4, 5, 7	Municipal employees	Curbside Weekly	Municipal employees	Curbside Weekly

RESIDENTIAL AND COMMERCIAL RESULTS

In addition to what is collected at the curb or at local drop-off sites, recycling occurs in local businesses.

Table 4-2 lists the municipalities along with the total tons of recyclables reported for 2011. Residential curbside and drop-off results are shown. In addition, recycling collected from or dropped off at local processors from commercial businesses is included.

Because this was an exercise to determine how well municipal programs performed, only those materials commonly included in residential curbside and drop-off collection programs as well as those commonly found in the recycling containers at commercial and institutional establishments were used. These would include the materials specified for recovery in Act 101, primarily packaging. The categories of materials were glass, aluminum, and bimetal food and beverage containers, plastic bottles, jugs, tubs, and other related food containers. Paper and paperboard were also represented in the form of newspapers and magazines, junk mail, office paper, cardboard boxes, etc. These items are generated and recovered at different rates by residential and commercial sources.

Excluded were items commonly recovered by scrap dealers and industrial recyclers, such as aluminum siding, automotive parts, fencing, railing, steel and fiber drums, other forms of scrap metal and wood pallets, etc.

Erie County Recycles

0.87 pounds of Act 101 materials per person per day

glass, aluminum, and bimetal food and beverage containers, plastic bottles, jugs, and tubs, paper and paperboard



Table 4-2 Erie County Reported Residential and Commercial Recycling in Tons Per Year**2011 Act 101 Reported Materials**

Tons Per Year	Residential Curbside	Residential Drop-off	Commercial Containerized	Commercial Drop-Off
Albion Borough	0.00	0.00	0.00	0.00
Amity Township	0.00	0.00	0.00	0.00
Concord Township	0.00	5.10	0.00	0.00
Conneaut Township	0.00	0.00	0.00	0.00
Corry City	229.60	0.00	401.50	0.00
Cranesville Borough	0.00	5.60	0.00	0.00
Edinboro Borough	426.50	0.00	649.60	0.40
Elgin Borough	0.00	0.00	0.00	0.00
Elk Creek Township	0.00	5.60	0.00	0.00
Erie City	6,453.60	8,973.00	5,341.90	0.00
Fairview Township	862.60	133.90	682.00	0.00
Franklin Township	0.00	5.60	0.00	0.00
Girard Borough	131.40	3.70	30.50	0.00
Girard Township	187.40	8.10	64.20	0.00
Greene Township	159.30	0.00	31.70	0.00
Greenfield Township	54.00	22.30	0.00	0.00
Harborcreek Township	954.60	7.10	1,157.60	0.00
Lake City Borough	162.00	6.60	62.50	0.00
Lawrence Park Township.	198.40	0.00	130.40	0.00
LeBoeuf Township	0.00	0.00	0.00	0.00
McKean Borough	0.00	0.00	0.00	0.00
McKean Township.	0.00	0.00	0.00	0.00
Mill Village Borough	0.00	0.00	0.00	0.00
Millcreek Township	4,379.30	2,782.60	4,748.50	16.30
North East Borough	0.00	0.00	0.00	0.00
North East Township	153.00	33.70	177.10	0.00
Platea Borough	0.00	5.60	0.00	0.00
Springfield Township.	0.00	5.60	0.00	0.00
Summit Township	228.40	154.40	2,977.30	0.00
Union Township	0.00	0.00	0.00	0.00
Union City Borough	91.90	4.80	91.00	0.00
Venango Township	0.00	0.00	0.00	0.00
Washington Township	0.00	0.00	0.00	0.00
Waterford Borough	8.60	0.00	37.50	0.00
Waterford Township	0.00	0.00	0.00	0.00
Wattsburg Borough	0.00	0.00	0.00	0.00
Wayne Township	0.00	5.10	0.00	0.00
Wesleyville Borough	44.20	3.70	67.10	0.00
Erie County Unspecified	0.80	738.20	346.60	0.00
Grand Totals:	14,725.60	12,910.30	16,997.00	16.70

A CLOSER EXAMINATION OF RESIDENTIAL RECYCLING PERFORMANCE

During the planning process, local conditions and approaches to recycling were examined in depth. In addition to establishing where recycling services prevailed within the County, it was important to understand how well those programs performed. While the existence of a widespread infrastructure may provide the appearance of recycling, the ultimate measure of a program is whether or not it is capturing enough materials. As a start, Erie County needed to understand the strengths and weaknesses that exist in current programs, what materials are affected both negatively and positively, and what substitute mechanisms could be introduced to improve conditions.

Equitable Measurements



Using similar metrics, and removing population as an advantage, is a good way to compare and evaluate municipal programs on an equal basis.

Comparing similar metrics for each municipality that offers a recycling collection program is a good way to determine which programs may be succeeding and which ones may need to be revised. The Erie County Recycling Coordinator already facilitates the capture, tracking and monitoring of recycling statistics from local municipalities. Information is collected from local haulers, businesses, brokers, and processors. Therefore, records of the total tons of material reportedly recovered were readily available. The reports include data on all types of materials from a variety of sources including local residents.

Population largely determines the total quantities of waste generated, recovered, and disposed. Comparing local programs based solely on the total tons reported presents an unfair bias to larger municipalities. Therefore, it is necessary to establish a common denominator that would equally measure all municipalities, regardless of size. To do so, two

known factors were used, housing units and weights reported. The resulting measurement, which could then be applied in a fair comparative evaluation was the number of pounds per housing unit.

All serviceable occupied housing units were used to calculate performance, not just those who participate in recycling or subscribe to collection service. For operational purposes, it is common to focus on the pounds per participating units. This is useful for calculating the number of homes that can be serviced on a route. However, the true measure of a program's success is the ratio of material recovered compared to the total amount generated, and therefore potentially recoverable, from all serviceable occupied housing units in the community.

To put this in perspective, assume that in a year a total of 200 tons were recovered from a village with 500 homes and a total of 8,000 tons were recovered from a city with 18,000

homes. Although the city clearly collected more total tons of material, the village collected a greater percentage of the total material available for recovery from homes within its jurisdiction. In other words, the village collected 19.23 pounds per home per week and the city collected only 17.09 pounds per home per week. Therefore, the village would be considered to have a more effective and successful program than the city, in spite of the greater tonnage.

To look at it another way, if the city were to perform at the same rate as the village, it could conceivably collect 2.14 more pounds per home per week and increase its annual recovery by approximately 1,000 tons. Converting the actual tons collected into a unit measure based on all potential participants provides an accurate view of overall performance. This metric creates an equal standard for large and small communities and is often the basis for performance driven monetary incentive plans.

Table 4-3 shows the Erie County municipalities that reported curbside and/or drop-off recycling collection data for 2011, the baseline year used in the evaluation. The results reflect a wide range of recovery. Overall, the combined curbside/drop-off Erie County average was 5.41 pounds per home collected per week.

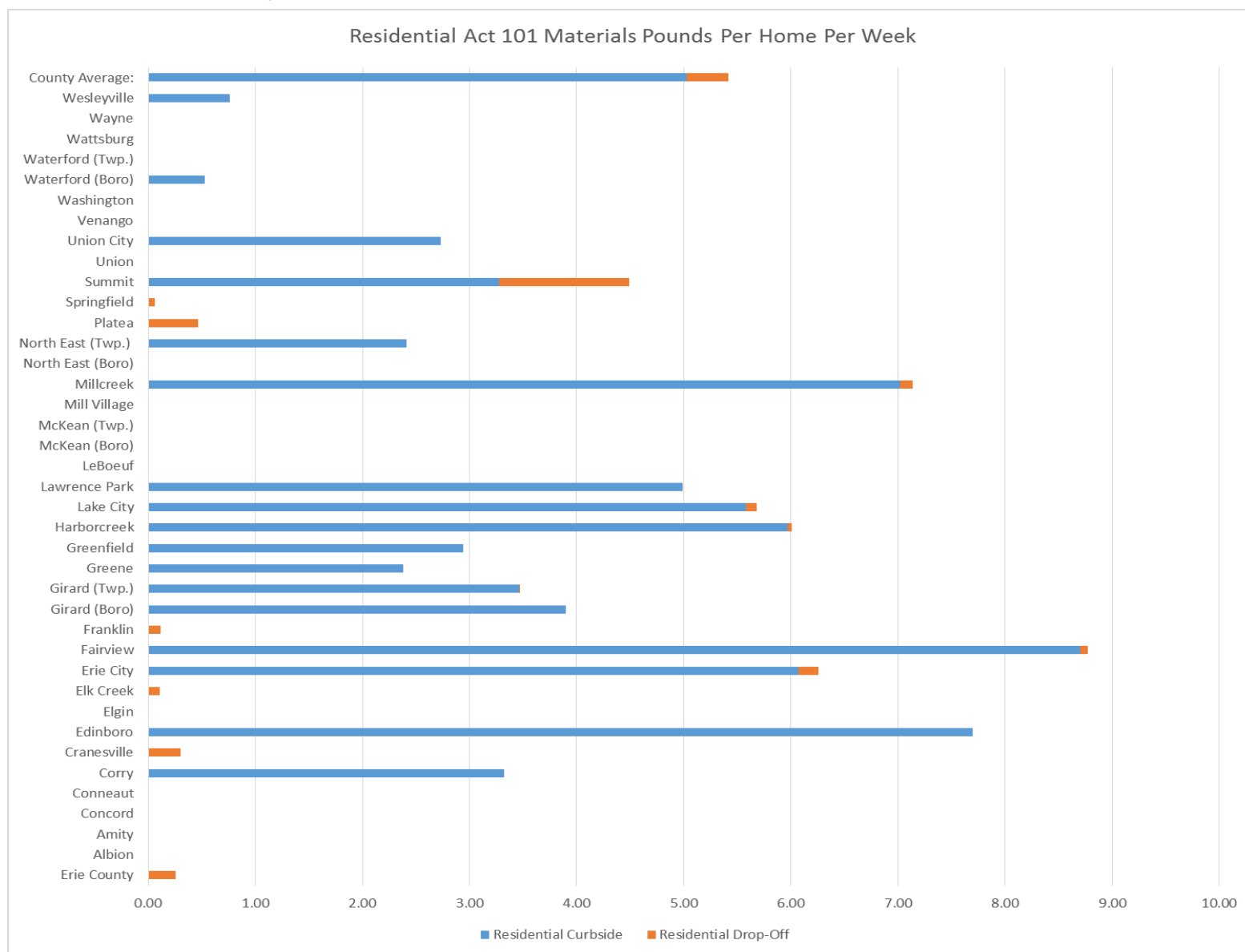
A number of municipalities exceed the County average, with Fairview Township outranking all others. Some of the top performers include: Lake City, Lawrence Park, Edinboro, the City of Erie, and the Townships of Millcreek, Harborcreek, and Summit.

Figure 4-4 illustrates how the municipalities compare to one another.

**Table 4-3 Municipal Recycling Performance
2011**

Lbs/ home/ week	Residential Curbside	Residential Drop-Off
<i>Erie County</i>	0.00	0.26
<i>Albion</i>	0.00	0.00
<i>Amity</i>	0.00	0.00
<i>Concord</i>	0.00	0.00
<i>Conneaut</i>	0.00	0.00
<i>Corry</i>	3.32	0.00
<i>Cranesville</i>	0.00	0.30
<i>Edinboro</i>	7.70	0.00
<i>Elgin</i>	0.00	0.00
<i>Elk Creek</i>	0.00	0.11
<i>Erie City</i>	6.07	0.19
<i>Fairview</i>	8.70	0.07
<i>Franklin</i>	0.00	0.12
<i>Girard (Boro)</i>	3.90	0.00
<i>Girard (Twp.)</i>	3.46	0.01
<i>Greene</i>	2.38	0.00
<i>Greenfield</i>	2.94	0.00
<i>Harborcreek</i>	5.97	0.04
<i>Lake City</i>	5.58	0.10
<i>Lawrence Park</i>	4.99	0.00
<i>LeBoeuf</i>	0.00	0.00
<i>McKean (Boro)</i>	0.00	0.00
<i>McKean (Twp.)</i>	0.00	0.00
<i>Mill Village</i>	0.00	0.00
<i>Millcreek</i>	7.02	0.12
<i>North East(Boro)</i>	0.00	0.00
<i>North East (Twp.)</i>	2.41	0.00
<i>Platea</i>	0.00	0.47
<i>Springfield</i>	0.00	0.06
<i>Summit</i>	3.28	1.21
<i>Union</i>	0.00	0.00
<i>Union City</i>	2.73	0.00
<i>Venango</i>	0.00	0.00
<i>Washington</i>	0.00	0.00
<i>Waterford (Boro)</i>	0.53	0.00
<i>Waterford (Twp.)</i>	0.00	0.00
<i>Wattsburg</i>	0.00	0.00
<i>Wayne</i>	0.00	0.00
<i>Wesleyville</i>	0.76	0.00
County Average:	5.03	0.39

Figure 4-4 Residential Recycling Curbside and Drop-off Performance for 2011 in Pounds Per Home Per Week



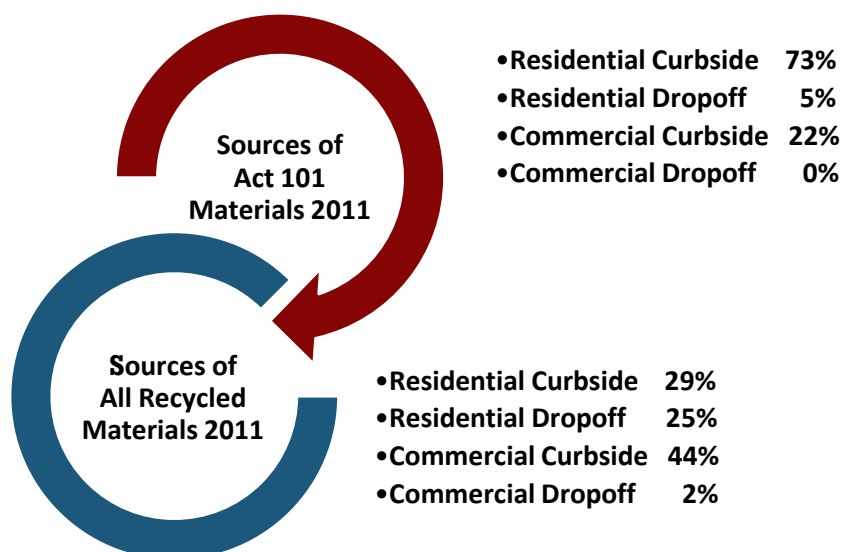
CURBSIDE CONVENIENCE COMPARED TO DROP-OFF COLLECTION

Erie County's reported data shows that municipalities, who provide curbside collection through a contracted service or by public workers, consistently report higher recovery rates and greater participation than those municipalities, who only provide recycling opportunities at centralized drop-off locations. Convenience differentiates the two methods and in turn, affects the results. A point, which is worth mentioning, is that drop-off collection points implemented by the County demonstrated a prohibitively high cost per ton for the small amount of material recovered. Mechanisms to promote the growth of curbside collection would be beneficial to Erie County residents. Partnerships between communities to implement a single hauler collection contract, and ordinances that require haulers to incorporate recycling with waste collection are some ways to facilitate that change.

EVALUATING COMMERCIAL RECYCLING EFFORTS

Although commercial establishments are represented, the bulk of the Act 101 recyclable materials in the reported data originate from recycling collection programs orchestrated and implemented by local municipalities. When other materials are included in the mix, in addition to the Act 101 items, commercial sources perform much better. That is to be expected because most of those added materials are not generated in residential settings and therefore do not provide any increase to the previously reviewed residential data. Nevertheless, Erie County's reported residential recovery still outpaces the data documented from commercial sources. The actual proportions per source are shown in Figure 4-5

Figure 4-5 Distribution of Erie County Residential and Commercial 2011 Reported Recyclables



The commercial activity is often more difficult to capture than the residential data, because each business has the freedom to make individual arrangements for collection and processing. Many larger chain stores sell their material directly to end users. There is often a lack of awareness among generators of the recyclables regarding the responsibility to report these activities. To further hinder the results is the inability of municipalities to dedicate a full time employee to gathering and compiling the data required for the report. Unfortunately, that means some of the commercial recycling may go unaccounted.

Reporting is not the only thing affecting the lower performance rates for commercial recycling. Businesses can be reluctant to recycle for a number of reasons. In urban locations, there are space constraints for collection containers. The perception that separating materials for recycling is too time consuming for employees can be a factor.

Reluctance to pay for an additional collection service is the primary reason overall. Knowing that, some haulers will skirt local ordinances, which mandate commercial entities to recycle, to gain a competitive pricing edge over haulers who do include the required service.

Moving forward, greater focus could be placed on assuring that commercial establishments, along with waste haulers, understand the law. It is difficult to police every establishment. However, visible enforcement of local ordinances, including public acknowledgement of offenses, can provide a strong incentive for haulers and businesses to comply. Proactive approaches are equally important.

Outreach programs can be effective when they involve direct interaction with business owners. If done in conjunction with an inventory of commercial recycling containers locations within a jurisdiction, the site visit can offer opportunities to reinforce the requirements to report the results. Where no containers exist, it opens the door for discussions on the need to comply with local ordinances and to offer assistance in establishing a recycling program, and how to obtain service.

GETTING BUSINESSES ON BOARD

“RecyclErie.” is a partnership formed between the County, Environment Erie, Millcreek Township, and Waste Management.

The program enlists local commercial businesses, institutions, organizations, and offices to pledge to implement a recycling program within their establishment. In return for their commitment, the organizations become “crew members” and are entitled to a number of benefits.

In addition to receiving discounted collection rates from Waste Management, participants are provided with instructional materials and collection containers to implement the program in-house.

Visibility is vital to increasing participation and customer loyalty, RecyclErie offers signage to display on site, and promotes each participating organization on the Internet, and in other media.

The program has experienced slow, but steady growth since its inception and has succeeded in raising recycling awareness in the commercial sector.



ERIE COUNTY RECYCLING PERFORMANCE COMPARED TO NATIONAL TRENDS

Program managers are always looking for ways to judge and improve upon local performance. As expectations and goals to recover increasing amounts of materials become more demanding, the need to understand in greater detail the nature of what is being collected becomes vital. In an effort to boost recovery, it is common for programs to attempt to capture more and more of certain materials. Unfortunately, many proceed with little knowledge of how much of those materials remain in the waste stream, or if what remains is feasible and cost effective to capture.

One way to make that determination, is to perform a characterization study on the waste, which is currently being disposed. However, for those whose budgets and timeframe do not support such a costly exercise, another approach is to benchmark local data against nationally vetted statistics and trends. A comparison to national trends is a vital exercise in identifying anomalies, as well. These often reveal a host of issues, from misreporting to actual program strengths and weaknesses. This section provides the results of such an exercise conducted during the planning process and using Erie County's reported recycling data.

SOURCE OF NATIONAL INFORMATION

Recycling statistics from local programs are generally compared to national information gathered and compiled on behalf of the United States Environmental Protection Agency. Since 1986, the USEPA has commissioned the Franklin Associates of Prairie Village, Kansas to research, analyze, and compile a report on municipal solid waste trends. The study is commonly known as "The Franklin Study" however, the most recent version available during the analysis was entitled *Municipal Solid Waste in the United States: Facts and Figures for 2011*. This ongoing project tracks municipal solid waste data back as far as 1960. Approximately, every two years a new report is issued.

LOCAL DATA

It is important to use data from the same period as the report to get an accurate measurement of local performance, as trends change over time.

To evaluate Erie County's recycling performance, the average of figures reported in 2011 and 2012 were used. This approach was used to avoid any potential spikes or flukes in a single year's reports.

ADJUSTING FOR MIXED MATERIALS

Recyclables are collected and processed in a variety of ways. Traditionally, materials were collected by type and each material was placed for collection in a separate bin. The materials were also transported in individual compartments of the body of the collection vehicle. This method is referred to as source separated recycling. Because of the pre-

sorted condition, the weight of each material collected was easier to determine and report.

In commingled and single stream recycling collection and processing programs, certain materials are collected and transported together in the same bin and within the body of the collection vehicle. In commingled programs, it is generally thought that glass, plastic, and metal bottles, cans and jugs are mixed together, while whatever forms of paper and cardboard that are accepted in the program are collected separately. Typically, a more narrow selection of plastics and paper are included in these programs. In a single stream recycling program, wider varieties of plastics are mixed in the bin with the glass and metals for collection, along with all forms of paper and cardboard.

Single Stream Recycling



The majority of the municipal recycling data reported in Erie County includes materials in primarily single stream but in some instances commingled mixed loads.

Providing an individual weight for each material is more complicated, if not impossible on in-bound loads, the source of data from which most recycling performance is reported. However, waste composition and characterization studies of commingled and single stream systems provide relatively consistent data that can be applied to reported figures like those provided by Erie County. The

composition of single stream and commingled recyclables differs depending on the items accepted by local processors. Other contributing factors include local demographics, economic conditions, frequency of collection, types of vehicles and processing equipment and if material are from a residential or commercial source. All of these factors were taken into consideration in the adjustments applied to the Erie County reported data.

USING WASTE COMPOSITION AS A MEASURE OF SUCCESS

Table 4-4 presents the recycled materials reported for 2011 and 2012 for Erie County. The figures, in tons per year (tpy), were adjusted from actual reported values to account for materials included in the categories reported as commingled and single stream. Table 4-4 also presents the Erie County municipal solid waste recycling quantities as compared to national figures based on the ongoing reports issued by the USEPA. Erie County data for 2011 and 2012 is shown as well as average data for the combined period 2011 and 2012.

READING THE DATA IN TABLE 4-4

For readers to understand more clearly the contents and findings shown in Table 4- 4 descriptions are provided for the items listed in each column.

Column 1–(Material by Category) Materials found in the municipal solid waste stream

Column 2– (MSW Generated % of Total) The percent that each item represents in the overall composition of the total municipal waste stream.

Column 3–(2011 MSW Recovered Nationally) The rate at which each material was recovered at the national level in 2010.

Column 4– (2011 Erie County Reported MSW Recovered) Erie Countywide total reported tons of materials recovered by all sources in 2011.

Column 5–(2012 Erie County Reported MSW Recovered) Erie Countywide total reported tons of materials recovered by all sources in 2012.

Column 6–(Average 2011/2012 Erie County Reported MSW Recovered)) The average total tons of each material expected to be recovered if Erie County performed similarly to the national averages for the level of population and types of materials collected.

Column 6–(Erie County Expected Recovery) Total tons of each material expected to be recovered if Erie County performed similarly to the national averages for the level of population and types of materials collected.

Column 7– (Erie County’s % of National Expected Recovery Achieved) York County is rated based on a percentage achieved of the national averages for 2010.

Understanding the Ratings

A rating is shown for each material. It does not represent the percentage of the total materials recovered, or what is often known as the “recycling rate.”

Rather, it shows for each material, whether Erie County’s performance is

- **Average (100%),**
- **Better than average (more than 100%) or**
- **Less than average (less than 100%)**

Table 4-4 Erie County Recycling Data Compared to National Rates.

Material	2011 MSW Generated % of Total	2011 MSW Rate Recovered Nationally	2011 Erie County Reported MSW Recovered	2012 Erie County Reported MSW Recovered	2011/2012 Average Erie County Reported MSW Recovered	Erie County Expected Recovery if Equal to National Trends	Erie County % attained of Expected Recovery
Glass Containers	3.71%	34.16%	2,898.68	2,582.78	2,740.73	2,882	95.10%
Aluminum Cans	0.53%	54.55%	657.17	715.88	686.53	655	104.81%
Bi Metal Cans	0.72%	70.56%	1,120.78	1,083.67	1,102.23	1,155	95.43%
Plastic #1 thru #7	5.55%	12.95%	1,777.74	2,042.05	1,909.90	1,637	116.67%
Plastic #1 and #2	1.40%	29.06%	950.22	912.34	931.28	927	100.46%
Paper:							
Newspapers/Mechanical papers	3.65%	72.46%	5,838.76	4,167.22	5,002.99	6,028	83.00%
Other Paper Nondurables	9.10%	46.56%	8,460.69	7,364.59	7,912.64	9,646	82.03%
Corrugated Boxes	11.76%	91.03%	8,994.07	9,444.90	9,219.48	24,366	37.84%
Other Paper & Paperboard Pkg	3.43%	21.68%	1,589.80	1,592.43	1,591.11	1,691	94.09%
Other Recyclable Materials:							
Textiles	4.13%	14.33%	0.90	0.00	0.45	1,346	0.03%
Furniture	4.44%	0.09%	48.00	0.00	24.00	9	266.67%
Rubber Tires	1.84%	44.57%	358.30	381.80	370.05	1,864	19.85%
Batteries	1.15%	96.19%	38.00	223.60	130.80	2,528	5.17%
Major Appliances	1.63%	64.22%	397.10	2,388.60	1,392.85	2,382	58.47%
Other Misc. Durables	7.04%	2.10%	212.50	94.40	153.45	336	45.67%
Yard Waste	13.46%	57.25%	23,726.60	22,110.30	22,918.45	17,547	130.61%

ERIE COUNTY'S RECYCLING REPORT CARD

Overall, Erie County performs above average for many of the commonly collected materials. This reinforces the strength of the curbside recycling program since the majority of the items are generated primarily by residential sources. There are however, a few materials for which recovery seems to be sub-par. Most of these materials are included in the paper and paper board category. Given the rural nature of parts of the county where open burning is still practiced, recovering less paper than the national average is not out of the ordinary. Other than not recovering it, the lower numbers could simply be a lack of reporting.

Figure 4-6 Primary Generators of Recyclable Materials

Residential	Commercial
<ul style="list-style-type: none">•BiMetal Cans 85%•Newsprint 85%•Aluminum Cans 81%•Glass 81%•Plastic Bottles & Jugs 80%•Junk Mail 65%•Magazines 65%	<ul style="list-style-type: none">•Lead Acid Batteries 100%•Rubber Tires 95%•Cardboard 90%•Major Appliances 90%•Office Paper 75%

One material that has the lowest level of recovery in the County, but at the national level has a 90% recovery rate, is corrugated cardboard. Interestingly, 90% of the corrugated cardboard generated and recycled comes from commercial sources. Another category with lower than average reported results is nondurable paper goods. This component of the municipal waste stream includes office paper, which is generated primarily by the commercial sector as well.

This could explain where the shortfall in the reported commercial recycling statistics originates.

With the large number of retail chain stores in the northeast quadrant of the County, one would expect to see a higher rate of recovery of corrugated

cardboard. If for no other reason than shareholder profitability expectations, recycling corrugated cardboard is standard practice for most corporate chains.

Lack of reporting could be the root of the problem. If so, troubleshooting the impediments to capturing that data and addressing them should be a joint effort between the County and municipalities during the implementation of the Plan. If in fact the issue is more serious, and recycling is not occurring, then the strategy will need to lean more toward enforcement efforts, particularly in the mandated municipalities.

The recovery of office paper could similarly be nothing more than poor reporting practices. A considerable amount of office paper is handled by document destruction companies. Although these companies are some of the largest paper recyclers in the world, they do not readily identify themselves in the same category as transporters of waste and recyclables. Consequently, they can fail to report their activities.

Based on input from the Solid Waste Advisory Committee, the ongoing hard work of RecyclErie, and outreach conducted by the County, it is likely that office buildings in general do not have active recycling programs. Space constraints for outside containers, failure of the property owner or manager to consider recycling in the rental services, disinterested tenants and other issues, are all contributing factors. The Solid Waste Advisory Committee offered opinions on the need for mandated municipalities to address the poor participation in recycling by commercial establishments, schools, and institutions.

LEAF AND YARD WASTE MANAGEMENT PROGRAMS

The municipalities mandated by Act 101 to provide curbside recycling also have requirements to manage leaf waste. In these municipalities, leaf waste must be separated from municipal solid waste and collected for processing into mulch or compost. Leaf waste consists of leaves, tree trimmings, brush, and other garden residues, but excludes grass clippings. Although the Act specifies that leaf waste must be collected once per month, PADEP has made some allowances to decrease the frequency of collection, if other conditions are met. Municipalities are permitted to conduct curbside collections on a limited basis twice per year. One collection is required in the spring to accommodate brush and trimmings from yard clean-ups and garden preparation. The second collection is to provide for autumn leaves, garden residues, and tree trimmings. Under the reduced collection frequency scenario, municipalities must provide or designate a convenient drop-off site for residents to deliver leaf waste during the year.



According to the municipal services survey conducted by the Department of Planning, a significant number of mandated municipalities collect leaf waste weekly in conjunction with their municipal waste and recycling programs. Seasonal collections are also popular. Monthly collections for leaf waste do exist, but are not as common in Erie County mandated municipalities as they are in other Pennsylvania counties.

Several municipalities provide drop-off collection sites for leaf waste and brush. In addition a few private sector operations accept material. Table 4-5 shows the compost and/or mulching sites located in Erie County.

Table 4-5 Composting and Mulching Facilities Located in Erie County

Facility	Street address	City/State
City of Erie Composting Facility	City Hall 626 State Street Room 507C	Erie, PA
Corry City Compost Site	650 East Smith Street	Corry, PA
Edinboro Borough Compost Site	South Perry Lane,	Edinboro, PA
Fairview Evergreen Nursery	7475 Main St.	Fairview, PA
Girard Borough Compost Site	State Route 20	Girard, PA
Harborcreek Township Compost Site	5601 Buffalo Road	Harborcreek, PA
Millfair Compost and Recycling Center	2301 Millfair Road	Erie, PA
Nelson's Alternative Disposal	9081 Peach St.	Waterford, PA
North East Township Compost Site	Gravel Pit Park	North East, PA
Recycle America Waste Management Compost Site	975 Robinson Road East	Erie, PA
Union City Borough Compost Site	13 S. Main St.	Union City, PA
Waterford Borough Compost Site	West Second St. and Circuit St.	Waterford, PA
Wesleyville Borough Compost Site	3421 Buffalo Road	North East, PA

PROGRAMS SPONSORED BY ERIE COUNTY

Unlike the municipalities, counties in Pennsylvania have no mandatory obligation to provide recycling, yard waste management, or other collection programs. All Erie County sponsored recycling programs, or special collection events are implemented on a strictly voluntary basis.

Erie County currently offers a variety of services to local municipalities, businesses, and residents. These programs are all dependent on the availability of grants and funding derived from the fees assessed on waste disposal. The uncertainty in funding can make the ability to plan for and sustain such services difficult. However, Erie County has been able to offer quality programs that complement the efforts of the municipalities and leverage the resources of the private sector.

RECYCLING SUMMIT

Each year, the Department of Planning hosts a Recycling Summit for local municipal representatives. The Summit serves as a great mechanism for the County to update and inform the municipalities on the status of the County's programs, new state regulatory initiatives, and grant opportunities. In addition, outside speakers are invited to provide

mini-seminars on best practices and topics relevant to waste management and recycling at the municipal level. Each year, an award is presented to the municipality with the best recycling performance.

The Summit has increased recycling awareness and served as catalyst to expand municipal recycling in Erie County. The peer to peer exchange reinforces that new programs and technologies can be implemented.

ERIE COUNTY RECYCLING CONVENIENCE CENTER

The most recent addition to Erie County’s recycling programs was the opening of the Erie County Recycling Convenience Center. Located at 1624 Filmore Ave., in Millcreek Township, the primary purpose of the Center is to provide a convenient location to collect electronic discards and Household Hazardous Waste (HHW). Residents are required to call ahead for a scheduled time to deliver their items. This reduces wait times and also allows the technicians at the facility to properly identify these hazardous substances to ensure they are managed and processed appropriately.

HOUSEHOLD HAZARDOUS WASTE

Most homeowners would be surprised to discover that many products which they use on a regular basis would be categorized as hazardous materials if found in an industrial setting. Because they are generated in a residential context, they are classified as Household Hazardous Waste (HHW). Cleaning agents, pool chemicals, paints, herbicides, and pesticides are all considered HHW. Many of these materials may be ignitable and/or poisonous and therefore a serious health and safety hazard in homes especially to children and the elderly. They also pose threats to the community in general.

Unexpected dangers occur when HHW combines with regular household trash; for example, soft drinks mixed with swimming pool dry chlorine can ignite. More than two percent of all garbage collectors are injured by chemical burns, explosions, etc. each year from HHW in trash.

The Pennsylvania Department of Environmental Protection estimates that each person in Pennsylvania generates an average of four pounds of Household Hazardous Waste (HHW) each year. With an estimated population of 280,985 Erie County could expect to produce approximately 562 tons of HHW per year.

Convenient



Responsible



Secure



The magnitude of HHW should not be underestimated. Communities in which residents remain at the same location for many years often find that the expected annual volume of HHW accumulates in homes over time rather than being disposed on a regular basis. The average household may have up to 16 pounds of HHW in storage.

Individuals faced with eventual removal of these accumulated quantities often encounter significant obstacles and associated costs. Providing regularly scheduled HHW collection events and providing a database of other local commercial outlets can prevent pollution and accidents.

DISCARDED ELECTRONICS

Electronic devices all become disposable commodities within extremely short time spans. Current trends show that items such as televisions, computers, and monitors are replaced by newer, better models every few years. For smaller devices like cell phones, digital cameras, etc, this happens as soon as every few months. Discarded electronics contain materials like lead, mercury and other chemical additives, which present potential environmental hazards when disposed in a landfill. These chemicals can leach into the soil and groundwater.

Covered Device Recycling Act

Pennsylvania legislators recently adopted the Covered Device Recovery Act (Act 108 of 2010 or CDRA). This piece of legislation provides for extended producer responsibility for discarded electronics, including computers and televisions, and banned these items from landfill disposal beginning in 2013. The Act requires manufacturers to pay for the recycling of these items based on the volume of products they manufacture and sell. However, orphan materials, those produced prior to the effective date of the Act and/or by companies that no longer exist, are not included. It is anticipated that counties will still need to play a role in the collection of discarded electronics not covered by the Act and until the wave of orphan materials minimizes.

COUNTY DROP-OFF RECYCLING PROGRAM

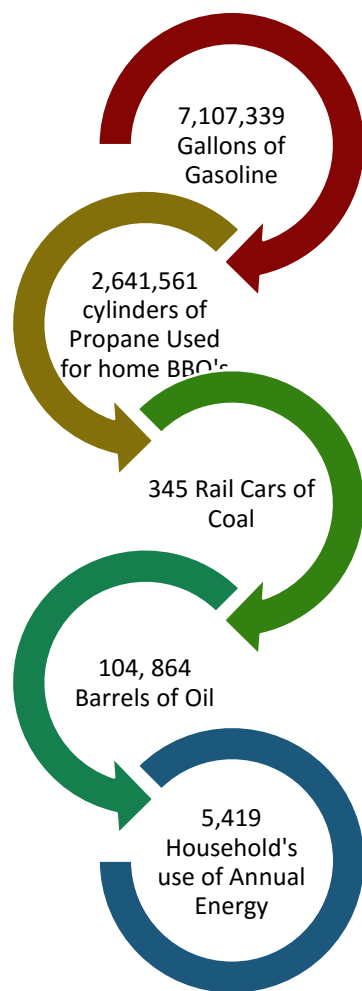
A recycling drop-off collection program funded by the County with service provided by a private sector contractor has operated since 2007. The objective of the program was to provide recycling opportunities to those areas of the County where curbside collection was not available. Ultimately, the goal was to establish the practice of recycling and then assist the municipality in transitioning to a curbside program. The program currently serves the communities of Albion Borough, Washington Township, and Elgin Borough. Based on the volume of material collected, the program is costly to operate. In addition, because many of the bins are in areas with voluntary waste collection, a considerable amount of contamination from deliberate dumping of trash occurs at the sites. The County is currently reevaluating this program. Other local counties facing similar circumstances, opted to centralize their drop-off collections. Erie County may be able to utilize its existing Convenience Center for that purpose.

PRIVATE SECTOR INVESTMENTS IN RECYCLING

Without the investments in recycling made by private companies, many of the services and programs sponsored by the County and local municipalities would not be possible. Most importantly, recycling supports the local economy by creating jobs. Many transporters of waste offer the collection of recyclables to their residential and commercial customers. Scrap dealers and processors receive materials from the general public. Document destruction companies process files and other data and recycle the paper. Services for processing electronic discards, household hazardous waste, printer cartridges, waste tires, and other special handling materials have also expended in the region. Finally, to close the loop on that material, a number of local businesses like Rehrig Pacific, Erie Energy, and Engineered Plastics, rely on recycled feedstock to support the development and manufacturing of new products.

ENVIRONMENTAL BENEFITS

Figure 4-7 Energy Conserved by Recycling in Erie County



Until recently, it has been difficult to measure and quantify the environmental effects of recycling. Because the impact of these benefits is not immediate and direct to the recycler, the gains are often overlooked. It is important to acknowledge the positive effect that local recycling efforts have on conserving natural resources and energy production.

Figure 4-7 shows the environmental benefits of recycling in Erie County for 2011 based on the Waste Reduction Model (WARM) a tool created by the USEPA to track and evaluate greenhouse gas (GHG) emissions reductions. WARM can be used to assess the performance of a variety of waste management practices. The model calculated energy units (million BTU) based on material types commonly found in municipal solid waste collection programs in Erie County. These included, corrugated cardboard, paper, glass, aluminum, bimetal and plastics.

SUMMARY AND CONCLUSIONS

The combined efforts of Erie County public and private sector service providers, residents, businesses and manufacturers have been a success. For the most part the County achieves close to or exceeds many of the national recovery rates for materials. Recycling opportunities are prevalent throughout the County. The majority of residents enjoy the convenience of curbside recycling.

Some improvements could be made. Reporting issues seem to prevail in the commercial sector. Along with poor reporting, it would appear that commercial compliance is lower than expected in mandated municipalities. Whether the poor commercial participation is the result of circumstantial conditions, lack of awareness, or blatant disregard, future efforts should focus on improving the situation.

This section covered services currently available in Erie County. What it does not mention are avenues for material recovery that could be made available in the future. For instance, there is no large scale food waste composting or processing operation in the County. No construction/demolition waste recycler or facility to divert and recycle disaster debris exists.

Recommendations for improving current conditions and introducing new service options along with a suggested timeframe for implementation are outlined in Chapter 5.

CHAPTER FIVE

Future Focus and Strategies

During the planning process the Solid Waste Advisory Committee reviewed the existing municipal waste collection and disposal infrastructure, numerous stakeholder contributions in recycling, and the variety of County supported programs. That exercise demonstrated that Erie County has made considerable advancements since the adoption of the first Erie County Municipal Solid Waste Management Plan developed under the provisions of Act 101. Residential curbside waste and recycling is available throughout the majority of the county. Drop-off recycling collection supplements for areas where curbside recycling has not yet been implemented. Overall, residential recycling performance meets or exceeds the national averages. Regional landfills equipped with environmental pollution controls have an abundance of capacity to provide for the needs of the County's municipal waste.

The same review process also revealed select areas in which Erie County could make improvements. This section focuses on the recommendations and solutions to enhance municipal solid waste management throughout the County. It is anticipated that future improvements will require the cooperation of public and private sector stakeholders, and include efforts from the municipalities and Erie County government. Because existing programs or services have been discussed in other chapters, they are not included in this section unless significant revisions are proposed.

Considering that the Plan covers a ten year period, the recommended actions are staged to occur over several years. Some suggestions may require further study or consideration to determine feasibility and a reasonable course of action based on local resources. The recommendations are presented based on designated areas for improvement and include action items specific to each issue. They are not shown in any particular order of importance or priority.

MOTIVATING COMMERCIAL AND INSTITUTIONAL RECYCLING

In the mandated communities of the Cities of Erie, and Corry, the Boroughs of Edinboro, Girard, and Lawrence Park, along with Fairview, Harborcreek, Millcreek, and Summit Townships, businesses are required to recycle by Act 101 and by local ordinances. In the remaining areas of the County, commercial recycling is strictly a voluntary effort. During lengthy discussions and examination of commercial recycling in Erie County, the Solid Waste Advisory Committee concluded that in the mandated communities, it appears that businesses fail to comply with the recycling rules and regulations. Where recycling is voluntary, as might be expected, participation seems even lower. Part of that perception is based directly on the reported data, which indicates that residential recycling outperforms the commercial establishments in Erie County. In addition, the

commercial reported data shows that, even for the commonly recovered commercial materials, Erie County's commercial recycling figures were lower than expected based on national averages.

Business owners play an important role in advancing Erie County's sustainability goals. Understanding the reasons behind poor commercial recycling performance is crucial in providing a remedy. One of the suspected problems is poor reporting. Another issue is unwillingness to pay for recycling services. Finally, transporters can make it difficult for businesses to recycle by failing to offer recycling services, and/or by making it overly costly to participate.

To incentivize businesses to recycle, it is important that they understand environmentally friendly practices, which can be easily implemented. In areas where it is the law, it is also important to demonstrate some level of enforcement. Getting the message to business owners and their employees requires the same effort as educating the County's residents. Because there are fewer businesses than homes, however, it is easier to reach this group face to face. It also has a more lasting impact.

Figure 5-1 outlines a plan to increase commercial recycling that includes efforts from the County and the municipalities.

Figure 5-1 Commercial Recycling Goal

Goal

To increase commercial recycling throughout Erie County

County Action Item

- The County will initiate a Commercial Recycling Summit similar to the municipal version currently held each year. Holding these sessions in close proximity to the required reporting periods could boost the responses and improve the accuracy of the data. *First Summit targeted for 2016.*
- The first Summit should be developed in conjunction with the mandated municipalities and feature local ordinances and reporting requirements.
- Future Summit programs could include topics including but not limited to Green Buildings, Organic Composting, and Recycled Content Procurement, etc.
- Local success stories could be featured as part of the Summits.
- Summits could be conducted in partnership with the PADEP, the Professional Recyclers of Pennsylvania, and other local resources.

Municipal Action Item

- The mandated municipalities shall develop better mechanisms to enforce the recycling ordinances. and collaborate with the County to develop a Commercial Recycling Summit as part of their Act 101 commercial recycling education requirements. *Action targeted to begin in 2016 and continue with a goal of completion by 2019.*

BUILDING PUBLIC AWARENESS AND SUPPORT

The success or failure of local policies and programs is highly dependent on the understanding, awareness, and subsequent actions of the intended participants. For this reason, it is important to promote the desired behavior as part of the Erie County Municipal Solid Waste Management Plan. Education serves as the foundation of behavioral change. The need to influence and change the overall attitudes of citizens and local officials was considered important by the Solid Waste Advisory Committee.

Social pressure is another valuable tool in motivating recycling and other desirable conservation behaviors. Simply put, identifying proper waste management practices as the “social norm” has the same effect as the “keeping up with the Jones” syndrome. In that all too common phenomenon, residents of a community feel compelled to upgrade their purchases and lifestyles to emulate their neighbors for fear of being ostracized. Initiatives using this approach in other areas have resulted in proven and lasting effects.

It is impossible for the staff to meet personally with every resident and business owner. However, a systematic communications plan can accomplish the mission with less legwork. It is most effective when conducted on multiple levels within a community. Starting in elementary schools is a way to initially drive home the message. Following through with the same message to civic and chamber groups, local governments and at community events reinforces the lesson. When affordable, the repetitive nature of radio and cable television ad campaigns can be extremely effective. In today’s technologically savvy environment, social marketing is essential and expected by a large portion of the population.

Erie County has always made an effort to educate the public. A comprehensive public education initiative or a promotional campaign for local services are necessary to ensure proper waste management behaviors and to sustain the mission and goals of the County.

Figure 5-2 lists the actions necessary to develop a comprehensive education program.

Figure 5-2 Public Education and Awareness Campaign Goal

Goal

To develop and implement a campaign promoting the benefits and cost effectiveness of all aspects of proper waste management

County Action Item

- The County should plan and implement a multi faceted waste and recycling public education program, which includes community outreach and corresponding print and media materials. *Action targeted to begin in 2017 through 2019*

Municipal Action Item

- To support this initiative, municipalities should incorporate the theme and message of the campaign into their own publications and web sites. Municipalities should help to distribute print materials made available from the County. *Action targeted to begin in 2018 through 2020*

Erie County's economy benefits from seasonal tourism. Lake Erie and its beaches were the draw for many residents that chose to make Erie County their homes. It equally attracts a steady stream of out-of-county traffic. Keeping the beaches, the waterways, and the surrounding municipalities clean is vital if the County hopes to continue to remain a vacation and convention destination and a desirable place to live.

Economic development in general can also be hampered by litter and accumulated waste. Property values are negatively affected and the appearance of blight is magnified when streets, storefronts and homes are cluttered with trash.

Extensive discussion occurred in the Solid Waste Advisory Committee meetings regarding the dilemma of discarded cigarette butts in the downtown area of the City of Erie as well as on Presque Isle. Efforts to keep the areas clean have been daunting. It was determined that the message not to litter required greater visibility. In addition, providing public venue receptacles for waste and butts could go a long way in reducing at least a portion of the activity.

Figure 5-3 shows the actions necessary to accomplish a reduction in littering and illegal dumping.

Figure 5-3 Anti-Littering and Illegal Dumping Goal

Goal

To foster community pride and ownership of the environment and to enhance Erie County as a tourist destination

County Action Item

- When funds are made available from DEP or Keep Pennsylvania Beautiful, assist municipalities in obtaining public venue waste and recycling containers. *Action targeted to begin 2017.*
- Seek funding from PADEP or utilize the Keep Pennsylvania Beautiful loan program for surveillance cameras to monitor known illegal dumping sites. *Action targeted to begin 2016.*
- Develop an anti-littering campaign that can be replicated by the municipalities. The campaign should have a segment that targets cigarette butts. *Action targeted to begin 2017.*

Municipal Action Items

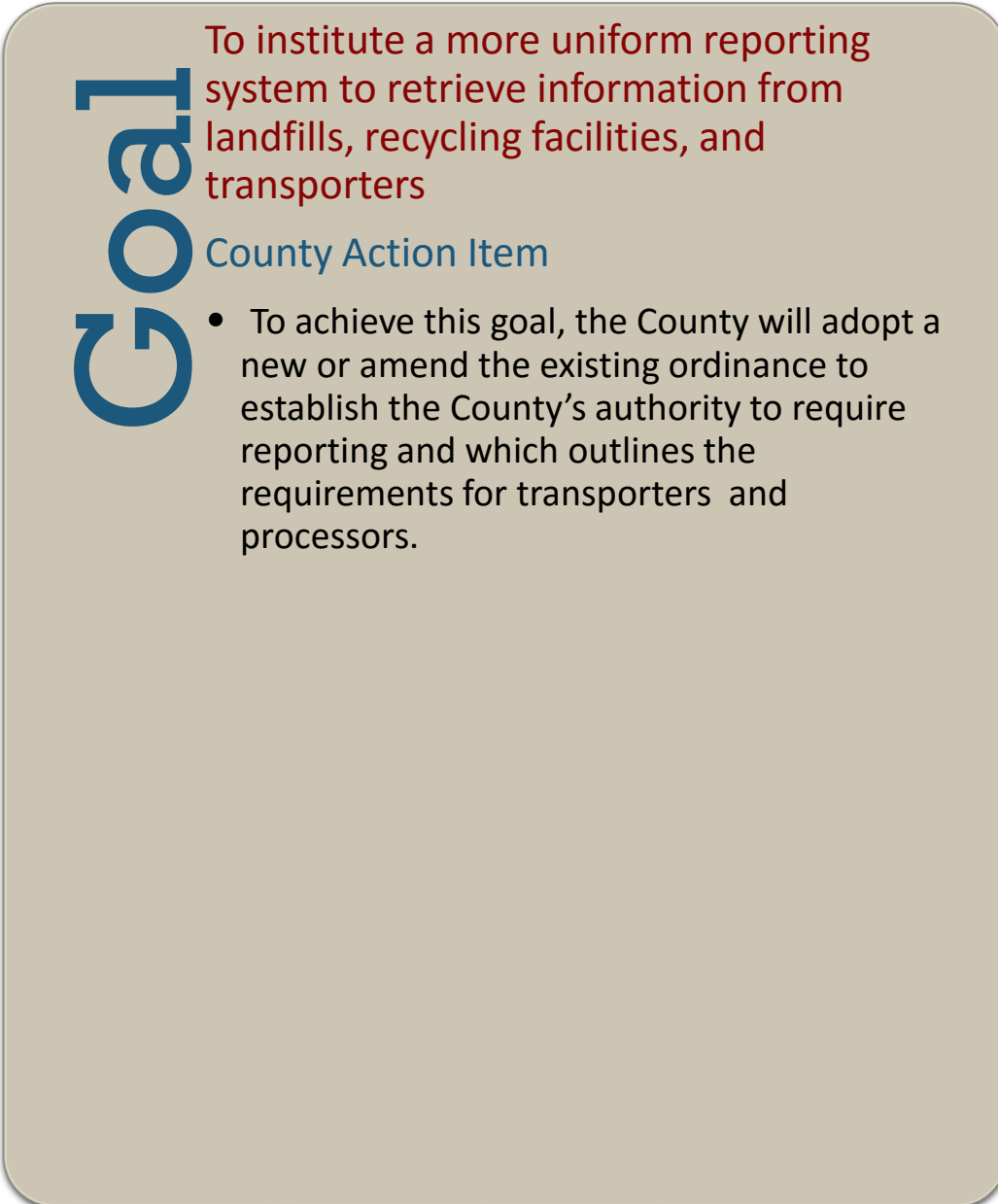
- Participate in an anti-littering campaign for Erie County. *Action targeted to begin 2017.*
- Work with the County to seek funding for public venue waste & recycling receptacles and extend their availability throughout public streets and parks. *Action targeted to begin 2017.*

Many exercises during the planning process illustrated that Erie County may not be receiving consistently reliable information from landfills, haulers, or recyclers. At the local level, a checks and balance system based on transporter data is often an effective means of targeting illegal dumping activity. It also offers a means to capture more complete and accurate information on recycling activities. For example, it is suspected that the low commercial recycling performance is due, in part, to the belief that more commercial recycling is occurring than being reported.

Currently, Erie County's solid waste ordinance has no enforceable mechanisms to require transporter or processor reporting. It still has language that refers to transporter licensing, which is no longer allowable. Since the ordinance requires amendments, now is the perfect time to introduce better tracking and monitoring procedures.

Figure 5-4 shows the actions recommended to fulfill these goals.

Figure 5-4 Reporting and Monitoring Goal



Goal To institute a more uniform reporting system to retrieve information from landfills, recycling facilities, and transporters

County Action Item

- To achieve this goal, the County will adopt a new or amend the existing ordinance to establish the County's authority to require reporting and which outlines the requirements for transporters and processors.

ORGANICS COMPOSTING

Food waste compromises nearly 22% of the municipal waste stream currently disposed. Food waste diversion, including residential curbside collection and from commercial sources, is now considered mainstream waste management policy in many regions. When food waste is composted, it can be marketed as a valuable soil amendment. When introduced into a digester, food waste becomes a source of energy. The PADEP continues to make the permitting process easier for composting sites, both large-scale commercial facilities and on-farm operations. In Erie County, no large-scale commercial facilities exist or have currently been proposed. Figure 5-5 outlines recommended actions to expand food waste diversion.

SUMMARY

Although Erie County and the municipalities, together with private sector interests, have successfully executed numerous accomplishments in local solid waste practices, there are areas where improvements could make a difference.

Six distinct goals were established for the Erie County Municipal Solid Waste Management Plan Update and Revision. The goals were determined by examining the current status and performance of programs and services within the County. The actions suggested to attain the goals are straightforward and practical. Each allows for flexible approaches based on the availability of funding and other resources. Timelines are suggested but can be modified based on needs and other priorities and unforeseen events.

Attainment of the new goals should increase recycling performance, enhance data management, increase cost effective services for the residents of Erie County, and improve the appearance of local municipalities.

Figure 5-5 Food Waste Diversion Goal

Goal

To encourage the development of an organics composting infrastructure that can service the needs of Erie County

County Action Item

- To achieve this goal, the County will conduct a feasibility study to determine the local sources and quantities of organic waste, particularly food waste; the willingness of potential candidates to segregate the material; and the availability of investors, whether public or private to design and develop the collection and processing network.

Study targeted for 2016.

County Action Item

- If the study shows that food waste composting is feasible to implement, the County will engage commercial food waste generators by hosting a series of informational seminars on the benefits of food waste minimization and diversion. The topics may cover equipment and new technologies, the process of food waste segregation, the pros and cons of various processing methods, and the permitting process. *Actions targeted to begin in 2018.*
- Potential investors in food waste processing would also be included in the sessions, along with municipal officials with an interest in hosting such a facility, or implementing a residential curbside food waste collection program. Local transporters would be invited to create an awareness of how the material should be handled and how it may impact their current operations.

Future Disposal Capacity Commitments

Based on the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101), the fundamental purpose of the Erie County Municipal Solid Waste Management Plan is to project future waste generation and recovery and to secure adequate capacity for the disposal of the remaining material. Capacity guarantees are to provide for a 10-year span. A variety of mechanisms can be utilized that satisfy this requirement. Each has procedural and legal implications that can be benefits or detractors depending upon local circumstances. Erie County has historically utilized a formal contractual agreement as the preferred guarantee of capacity. The same mechanism was chosen to fulfill the requirement of Act 101 for the 2015 Plan.

Chapter 6 outlines the step wise process for procuring agreements for future disposal capacity. In addition, it describes the selection criteria that was used to evaluate the proposals submitted from disposal facilities responding to the County's solicitation for disposal capacity.

PROJECTING DISPOSAL CAPACITY NEEDS

A variety of factors must be taken into account to calculate the volume of waste that will be disposed over the next 20 years. Because waste generation is driven in part by population and other demographic influences, data from the U.S. Census Bureau and projected trends determined by the Erie County Department of Planning served as the sources for those figures. Data regarding historic waste generation, recycling and disposal was taken from local sources and facility reports submitted to PADEP. National trends in waste generation, recovery, and disposal were also considered. Other information is drawn from professionally recognized and well documented assumptions. Based on these combined factors, the capacity required by the County for the next ten years was calculated.

During the planning process Erie County's current disposal practices were reviewed. Erie County's actual use of the regional transfer stations and disposal facilities designated in the past Plan was identified. In addition, the consumption of disposal capacity at those facilities by other counties, states, and industrial generators was evaluated. The impact of recycling efforts was also factored into the projections. The capacity projections, when compared to the current volumes of waste reportedly received from all sources at regional landfills, showed no indication of pending capacity deficits. However, because current agreements are set to expire within the next year, it was necessary for the County to secure new guarantees.

CAPACITY PROCUREMENT PROCESS

A Request for Proposals for Disposal Capacity was issued by the Erie County Department of Planning. The PADEP, who was notified of the County's intent to solicit for capacity assurances, posted the official solicitation notice in Pennsylvania Bulletin. In addition, the solicitation appeared in the print and digital online versions of a national trade publication, Waste 360.

To reach the greatest number of potentially interested parties, in addition to public notification, the County circulated the Request for Proposals through industry trade organizations and to facilities within the region permitted to dispose and/or process municipal solid waste. These combined efforts assured that facilities located both within and out of the state would be informed of the County's request.

SELECTION CRITERIA

Facilities were expected to adhere to clearly defined proposal submission guidelines, which specified the format and content required for administrative completeness and technical merit review. The selection process was non-biased. All facilities and disposal processes were given equal consideration and opportunity. The potential need to make inquiries regarding the content of the proposals, ask for supplemental documentation, or request further clarifications were built into the technical review process. Categorized criteria and established requirements used in the review and selection process are described below. No one criteria held particular weight over another.

PERMIT STATUS AND REMAINING CAPACITY

Facilities were required to demonstrate the existence of a current operating permit issued by the PADEP or the equivalent state regulatory agency for non-Pennsylvania facilities. The projected life of the facility and its ability to provide available capacity for all or some portion of the County's needs during the period of the Plan was a key indicator of the site's ability to meet the service needs of the County.

REGULATORY COMPLIANCE FINANCIAL STRENGTH AND RISK ASSESSMENT

Regulatory compliance is a measure of potential liabilities. A review of the compliance history of the facility was included in the assessment. The compliance history for each company and facility was reviewed and condensed as a tabulation of violations, consent orders, penalties, etc.

Documentation of the credit worthiness and financial stability of the operator, along with the levels of public and environmental liability protection were required. Each was considered an important indicator of the potential level of risk to the County and the facility's ability to maintain and provide a financially sound disposal system.

INDUSTRY QUALIFICATIONS AND EXPERIENCE

The experience of personnel located at the facility and who were directly responsible for management and operations was reviewed. The depth of waste industry experience was considered as a demonstration of the contractor's ability to provide reliable disposal service. Documented performance in related contractual scenarios was also considered in the evaluation.

TECHNICAL DESIGN AND OPERATIONAL METHODS

The ability to meet Federal, State, and Local standards for the operation of a municipal solid waste disposal facility was required. The technical design of the proposed facility and disposal process were evaluated based on the use of proven and accepted technology, demonstrated and approved alternatives, and best engineering practices. The effectiveness of design components such as liner composition, leachate treatment, and methane gas recovery was considered. The quality of operational plans for waste acceptance, emergency management, and contingencies for pollution prevention and control, safety, operational efficiency and energy production were important.

MINIMUM AND MAXIMUM ALLOWABLE DISPOSAL REQUIREMENTS

The evaluation included the ability of the facility to accept all or some of the municipal solid waste generated by Erie County on a daily and annual basis during the ten-year period of the Plan. The criteria made clear that "Put or Pay" disposal guarantees for predetermined quantities of Erie County waste were considered disincentives to recycling and therefore objectionable to the County.

MAXIMUM GATE RATES AND POTENTIAL COST TO COUNTY

Competitive pricing was not part of the determining criteria to be included in the Plan. However, because disposal is restricted to the facilities designated in the Plan, it was necessary to offer transporters, municipalities, individuals, and businesses full disclosure of the potential cost of each available disposal option. Therefore, facilities were required to submit a pricing matrix that established ceilings for the maximum fees, which would be charged for the contracted disposal services. Facilities were allowed to submit separate disposal rates for the different categories of municipal waste for which capacity was reserved. All fees and surcharges resulting from Act 101, host municipality or county agreements or other federal, state, and local statutes were to be identified and quantified.

No conditions were imposed on the disposal rate other than the facility-defined cap. The use of one or more of the designated facilities remains a matter of choice. The maximum rates do not preclude the ability of parties to negotiate lower fees based on business relationships and other factors.

Although proposals were invited for new or alternative disposal technologies, none was received in this solicitation process. In addition, no proposal included supposition of County partnerships or investments in the construction and operation of facilities. Based on these factors, no further cost/benefit comparison, life cycle analysis, or evaluation was deemed necessary.

PROPOSAL REVIEW AND EVALUATION

Respondents to the Request for Proposals included: Advanced Disposal Services, Casella Waste Management, Waste Management, and Vogel Holding. Combined, proposals for a total of seven landfills offered daily, annual, or contingency capacity assurances to the County. These were examined and reviewed to determine compliance with the submission criteria. The facilities that meet the criteria will be officially designated after the final approval of the Plan.

During the review and evaluation process, minor mistakes were noted. Several requests were made to eliminate deficiencies that occurred in regards to incomplete submissions for the back-up facilities. Answers and clarifications were provided for some items. That missing information is being incorporated as it is received prior to submission of the final Plan. The results of the proposal evaluation are presented in five sections following these narratives. Each section represents a segment of the legal Proposal, technical, operational, and financial selection criteria.

Tables 6-1 through 6-5 show the proposed facilities with their responses and demonstrated information condensed for presentation purposes.

Table 6-1 Contractors, Proposed Facilities, Legal Formalities

Facility			Contacts		Capacity Agreement		
Site Name	Owner	Site Location	Technical	Operational	All Required Forms and Signatures	Agreed to Contract Terms and Conditions Exceptions or Comments	Requires Put or Pay or Minimum Tonnage
Chestnut Valley Landfill	Advanced Disposal Services	1184 McClellandtown Road, McClellandtown, PA 15458	Bill Binnie	Don Henrichs	YES	YES	NO
Hyland Landfill	Casella Waste Management	6653 Herdman Road Angelica, NY	Terry Lunn	Joseph Boyles	Pending	Pending	NO
Greentree Landfill	Advanced Disposal Services	635 Toby Road Kersey, PA 15846	Bill Binnie	Don Henrichs	YES	YES	NO
LakeView Landfill	Waste Management	851 Robison Road Erie, PA 16509	Thomas Lewis	Tom Malesiewski	YES	YES	NO
McKean Landfill	Casella Waste Management	19 Ness Lane Kane, PA 16735	Mark Milliman	Randy Jensen	YES	YES	NO
Northwest Sanitary Landfill	Waste Management	1436 West Sunbury Road West Sunbury, PA 16061	Thomas Lewis	James Short	YES	YES	NO
Seneca Landfill	Vogel Holding Inc.	421 Hartman Road Evans City, PA 16033	Edward R. Vogel	Edward R. Vogel	YES	YES	NO

Table 6-2 Permit Status and Conditions of Operations

Facility	Local	Permitted		Accessibility and Terms of Use		
Site Name	Host Agreements	Permit # Issuing State Expiration Date	Remaining Permitted Capacity 2012	Current Constraints or Limitations	Operating Days Per Year	Operating Hours
Chestnut Valley Landfill	German Township Fayette County	PA 100419 9/16/2021	3,132,829 cyds	NONE Proposed as back-up facility only	Monday-Saturday (359)	4:00 AM- 8:00 PM (Sat-7:00AM -11:00 AM)
Greentree Landfill	Fox Township Elk County	PA 101397 12/08/2018	34,154,039 cyds	NONE	Monday-Saturday (359)	7:00 AM- 4:00 PM (Sat-7:00AM -11:00 AM)
Hyland Landfill	Angelica Allegany County, NY	NY 9-0232- 00003/00002 5/1/2015	9,7410,600 cyds	NONE Proposed as back-up facility only	Monday-Friday (260)	7:00AM-4:30PM Monday-Friday (Sat-on demand)
LakeView Landfill	Summit Township Erie County	PA 100329 8/13/2020	17,824,786 cyds	NONE	Monday-Friday (260)	7:30AM-3:30PM Monday-Friday
McKean Landfill	Sergeant Township McKean County	PA 100361 2/23/2021	33,436,150 cyds includes western expansion	NONE	Monday-Saturday (257)	8:00AM-3:45PM Monday-Friday (Sat-on demand)
Northwest Sanitary Landfill	Clay Township Butler County	PA 100585 3/23/2016	1,893,552 cyds	NONE	Monday-Friday (260)	7:00AM-4:00PM Monday-Friday
Seneca Landfill	Jackson Township Lancaster Township Butler County	PA 100403 10/5/2017	7,443,178 cyds	NONE	Monday - Saturday (313)	800AM-3:00PM Monday-Friday (Sat-8:00 AM-11:00 AM)

Table 6-3 Facility Design, Regulatory Compliance, and Financial Assurances

Facility		Design and Contingencies		Regulatory Compliance			Financial Assurance		
Site Name	Design, Leachate Treatment	Waste Plan for Emergency Disasters	Waste Plan for Facility Emergencies	# Violations	# Penalties, Consent Orders, Settlement Agreements	Unresolved Violations	Financial Disclosure	Public Liability Protection	Environment Pollution & Liability Protection
Chestnut Valley Landfill	Double composite liner Treatment Off site	YES	Submitted capacity agreements strictly as a back-up landfill	5	2 Civil Penalties or Consent Agreements confirming	3	Publicly Held Company Shareholders Report	\$2 million	Surety Bond \$11 million
Greentree Landfill	Double composite liner Treatment Onsite	YES	YES submitted capacity agreements for proposed back-up landfill	6	5	0		\$3 million	Surety Bond \$32,772,841
Hyland Landfill	Double composite liner Treatment Off site	YES	Submitted capacity agreements strictly as a back-up landfill	6	1	0	Publicly Held Company Shareholders Report	\$3 million	Surety Bond \$6,346,376
LakeView Landfill	Double composite liner Treatment Onsite	YES	YES submitted capacity agreements for proposed back-up landfill	3	1	0	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$16..5 million
McKean Landfill	Double composite liner Treatment Onsite	YES	YES submitted capacity agreements for proposed back-up landfill	0	0	0	Publicly Held Company Shareholders Report	\$3 million	Surety Bond \$8.4 million
Northwest Landfill	Double composite liner Treatment Onsite	YES	YES submitted capacity agreements for proposed back-up landfills	7	4	0	Publicly Held Company Shareholders Report	\$5 million	Surety Bond \$9.5 million
Seneca Landfill	60 mil double liner Treatment On site	YES	YES on site transfer station would haul to other County designated facilities	32	7	0	Privately Held Company/ Provided upon request	\$2 million	Collateral Bond \$9.8 million

Table 6-4 Daily and Annual Capacity Guarantees

Facility		Guarantees for Erie Waste Volumes		Daily Tons Reserved Capacity for Types of Waste				
Site Name	Owner	Maximum Annual Volume in Tons	% Erie Waste will accept	MSW	C&D	Sludge	Other	Donated Tons for Non-Profits
Chestnut Valley Landfill	Advanced Disposal Systems	195,355.4 (backup facility)	100%	10.95	2.24	8.62		0 tons
Greentree Landfill	Advanced Disposal Systems	195,355.4	100%	300	300	300		0 tons
Hyland Landfill	Casella Waste Management	148,740.90 (backup facility)	100%	572.08	48.14	131.15	N/A	0 tons
LakeView Landfill	Waste Management	195,355.4	100%	751.4				25 tons
McKean Landfill	Casella Waste Management	148,740.90	100%	572.08	48.14	131.15	N/A	0
Northwest Landfill	Waste Management	195,355.4	100%	751.4				25 tons
Seneca Landfill	Vogel Holding Inc.	5,860.7	3%	14.0	1.9	1.9	0.9	1 ton

Table 6-5 Schedule of Maximum Charges

Facility	Maximum Base Disposal Rate 1st Year					Add-on Costs	Total Maximum Disposal Rate with Fees 1st Year				
Site Name	MSW	C&D	SEWAGE SLUDGE	ICW	OTHER	Fees, Taxes, Surcharges	MSW	C&D	SEWAGE SLUDGE	ICW	OTHER
Chestnut Valley Landfill	\$37.73	\$37.62	\$37.62	N/A	N/A	\$7.60	\$ 45.22	\$ 45.22	\$ 45.22	N/A	N/A
Greentree Landfill	\$37.73	\$37.73	\$37.73	\$37.73	N/A	\$7.49	\$ 45.22	\$ 45.22	\$ 45.22	\$ 45.22	N/A
Hyland Landfill	\$31.29	\$31.29	\$35.54	\$35.54	N/A	\$3.61	\$35.00	\$35.00	\$39.25	\$39.35	N/A
LakeView Landfill	\$65.10	\$65.10	\$65.10	N/A	N/A	\$9	\$76.96	\$76.96	\$76.96	\$76.96	
McKean County Landfill	\$22.75	\$22.75	\$24.75	\$32.75	N/A	\$7.25	\$30.00	\$30.00	\$32.00	\$35.00	N/A
Northwest Landfill	\$65.10	\$65.10	\$65.10	\$65.10	N/A	\$7.60	\$72.70	\$72.70	\$72.70		N/A
Seneca Landfill	\$109.90	\$109.90	\$109.90	\$126.90	\$126.90	\$8.10	\$118.00	\$118.00	\$118.00	\$135.00	\$135.00

RECOMMENDATIONS FOR DISPOSAL FACILITY DESIGNATION

The review and evaluation of the proposals determined that all of the facilities meet the established selection criteria. Some of the facilities are operating with permits that will expire before 2021. A few have capacity that could be greatly depleted during the term of the contract, but have room for expansion and design modifications. In these instances, actions to modify or renew existing permits are expected to result in approvals. All qualify to become designated disposal facilities in the Erie County Municipal Solid Waste Management Plan. The facility with a pending permit application otherwise satisfies the requirements and could be considered a designated facility contingent on receipt of a permit approval.

In summary, the Erie County will execute and enter into disposal capacity agreements with the facilities shown here. The table is arranged in alphabetical order by the owner/operator with each corresponding facility listed below.

Table 6-7 Designated Facilities with Disposal Capacity Agreements with Erie County 2015-2024

Advanced Disposal Services	<ul style="list-style-type: none">• Greentree Landfill• Chestnut Valley Back-up Facility:
Casella Waste Management	<ul style="list-style-type: none">• McKean County Landfill• Hyland Landfill Back-up Facility:
Vogel Holding	<ul style="list-style-type: none">• Seneca Landfill
Waste Management	<ul style="list-style-type: none">• LakeView Landfill• Northwest Landfill

CHAPTER SEVEN

Plan Administration and Implementation

The oversight and enforcement of the policies and programs resulting from the Erie County Municipal Solid Waste Management Plan by default is the responsibility of the governing body of the County. It can, however, be delegated to another individual, agency, department or similar entity. Most top level county officials do shift this responsibility to a designee, because considerable effort and focus is required to comply with state regulatory and reporting requirements, and implement the programs designed to attain the goals and objectives of the Plan. In Erie County, these powers and responsibilities have been delegated to the Department of Planning. Therefore, solid waste management decision making remains as an integral part of county government.

This chapter discusses how the Erie County Department of Planning manages the programmatic, administrative and enforcement duties associated with the Plan.

COMPLIANCE AND ACCOUNTABILITY

Assuming the duties of Plan administration and implementation is a full time job. Within the Planning Department, a Recycling Coordinator, is assigned to fulfill this role. The Coordinator has varied responsibilities. Ultimately, ensuring that the County is compliant with the provisions of Act 101, is a priority. This includes development, implementation, and enforcement of the components of the Erie County Municipal Solid Waste Plan. In addition, the Coordinator must obtain, and compile the data necessary for the submission of the County's Annual Report to PADEP. Because data from the municipalities is vital to the overall Annual Report, the Coordinator facilitates the efforts of local government in gathering the necessary information. The Coordinator also monitors all reporting activities associated with the disposal capacity agreements, as well as fees that may be related to the reported tons.

PROGRAMS AND SERVICES

Outreach programs, seminars, special collection events, and feasibility studies are originated and supervised by the Recycling Coordinator, who serves as an important resource to the community. Public education, enforcement, and County sponsored programs are originated by the Coordinator. Educational pieces, advertising, and press releases are also designed and produced in this office. In most cases, the Coordinator is also expected to implement these services or arrange for the procurement of outside service providers. An ability to identify, predict and control program related costs is expected. Therefore, the Coordinator takes part in the budgetary planning process and is held accountable for all associated expenses and revenues.

FUNDING

Programs, services, administration, enforcement, and education can be costly. Local taxes cannot support all of the needs and demands of Erie County's municipal waste generators. It is crucial for the Coordinator to be informed and knowledgeable regarding the availability of federal and state grant funding as well as opportunities to obtain sponsorships and financial support from corporate programs.

AWARENESS AND COMMUNICATION

The Recycling Coordinator serves as the portal through which information on pending regulatory changes that could impact the County's programs filter through to the County Executive and the Council. Therefore, it is important for the Coordinator to establish an open line of communication with the Pennsylvania Department of Environmental Protection. Another source of current issues and professional development are the number of nonprofit trade organizations related to municipal waste management and recycling. Membership and participation in these organizations can help to provide continuing education opportunities and up to date information on solid waste, composting and recycling. It also establishes a vital peer to peer network for the Coordinator to seek advice and feedback on relevant issues.

COORDINATION

Although the County is responsible for implementing the Plan, many of the basic principles and components of responsible waste management are actually municipal functions. Issues, such as waste and recycling collection, remain a responsibility of local municipalities and business owners. As the name implies, the purpose of the County position is to coordinate and facilitate the efforts of Erie County's communities. As illustrated throughout the Plan, this approach has been successful in Erie County.

CHAPTER EIGHT

Public and Private Waste Management Roles

Waste management has long been considered a public service. In the past, local governments once owned and operated their own “town dumps.” This was commonplace throughout the nation, and the state of Pennsylvania. In more densely populated areas, waste collection was always an integral part of the municipal public works. Recycling, on the other hand, was initiated by entrepreneurs and risk takers who traded in a variety of scrap materials, rags, paper, and glass.

Conditions and circumstances shifted. The growing rate of waste generation at the end of the twentieth century, in conjunction with tighter federal and state environmental controls and regulations, created lucrative opportunities for private sector investment. The cost to comply with new design and operational requirements was prohibitive for small government operations. To feed these operations private hauling companies grew in the marketplace.

The closing of town dumps demonstrated that disposal capacity at the local level was neither limitless nor guaranteed. This subsequently prompted legislation that mandated recycling. Unlike the guaranteed revenues from handling waste, the mandates to implement residential recycling programs, regardless of market conditions, was not as inviting of a business venture. Consequently, local governments were, in some instances, forced to enter the business of recycling collection, and sometimes processing, just to comply with regulatory requirements.

Due to lower waste generation and disposal rates, along with an evolving waste stream, municipal waste management services have shifted again. Private sector investments in recycling collection and processing operations have expanded.

Although both the public and private sector are market participants, their service capabilities differ and their involvement is not distributed equally. This chapter describes the current degree of ownership in waste and recycling operations by Erie County and local municipalities. It also discusses future potential public operations that could result from the recommendations made in the Plan.

DISPOSAL SERVICES

Today, no publicly owned disposal facilities operate in Erie County. One municipal waste landfill located in Summit Township remains. It is owned and operated by Waste Management. Private sector entities own and operate all of the transfer stations.

COLLECTION

Waste collection services are predominantly private sector. To a smaller degree, collection is a public function. The City of Erie, Greene Township, North East Borough, and Wesleyville Borough still rely on public employees and vehicles to collect waste and recycling.

RECYCLING

Although recyclables are collected in public sector programs, they are ultimately managed by scrap dealers and recycling processors, which are private operations. In a few instances, nonprofit organizations do handle materials such as electronics, textiles and construction materials for the purpose of refurbishment, reuse and recycling.

COMPOSTING FACILITIES

The one area in which the public sector has a significant role in is in composting. At least ten municipal compost sites are located in Erie County. Most of these are small and were developed with the intent of managing waste from within each local jurisdiction. Millcreek and Fairview Townships operate a larger facility capable of handling material from outside sources.

Currently, only three privately owned and operated composting sites are known to exist on Erie County. One is operated by Waste Management. Fairview Evergreen Nursery operates another. Finally, Nelson's Alternative Disposal Systems operates in Summit Township.

FUTURE FACILITIES AND OPERATIONS

During the planning process, neither the County nor the municipalities gave any indication that new public disposal, processing or composting operations were being proposed. With the expansion of single stream recycling, the significant capital investment required, and the volume of materials needed to support it, recycling is expected to remain in the hands of private businesses. Although new technologies for disposal may be introduced at some point in the future, for the next ten years, it is safe to assume that the private sector landfill will not be replaced by a publically owned facility. Given the existing infrastructure, it is inevitable that the need for added composting capacity may arise during the time in which this Plan is implemented. It is probable that small sites would continue to function as municipal operations. However, it is anticipated that any attempt to increase food waste composting on a large scale would be a private sector investment.

CHAPTER NINE

Legal Mechanisms to Enforce the Plan

The Erie County Municipal Waste Management Plan outlines the roles, and guidelines of residents, municipalities, businesses and service providers. Ordinances, contracts and other procedures clarify the County's power to implement the Plan. These documents also serve as a direct means of enforcement.

The mechanisms designed for implementation of this Plan are discussed in the following narratives. Each document is provided in a separate section of the Appendices, with its specific location noted below.

New documents may be developed over time and others abandoned to simplify and improve the procedures associated with implementation. However, these changes will not alter the legal or contractual content of the Plan.

AMENDED WASTE FLOW CONTROL AND TRANSPORTER LICENSING ORDINANCE

The County drafted and approved the Waste Flow Control and Transporter Licensing Ordinance in 1992. It was subsequently revised in 1995, to require those engaged in the activity of collecting and transporting municipal waste and recyclables in Erie County to be licensed and report their activities. The bulk of the requirements of the ordinance have since been superseded by the Waste Transportation Safety Act (Act 90 of 2002) which provides for a statewide authorization program. Although the ordinance has a severability clause, what remains effective in the ordinance would be hard to enforce. Therefore additional amendments have been suggested for the implementation of this Plan update.

The amendments are intended to facilitate the County's annual reporting requirements to PADEP. By more thoroughly tracking and monitoring the activities of those engaged in handling and transporting waste, organic waste, and recyclables, the County increases opportunities to obtain Act 101, Section 904 Performance Grants. The proposed ordinance is located in Appendix C.

MUNICIPAL WASTE DISPOSAL CAPACITY AGREEMENT

The Municipal Waste Disposal Capacity Agreement (Appendix A) is the contract, which assures that disposal capacity is available throughout the period of the Plan for municipal waste generated in Erie County. The agreement establishes the types and volumes of waste; the maximum tipping fees; and the reporting requirements for each site. Each and every facility currently included in the Plan, as well as any in the future, must agree to the provisions of this Agreement. This ensures consistent and non-discriminatory terms,

conditions and standards among all facilities that are to be used for disposal/processing of Erie County municipal waste. Executed copies of the agreement are found in Appendix G.

PETITION TO ADD A PROCESSING/DISPOSAL FACILITY IN THE PLAN

The County recognizes that new facilities or technical processing opportunities may become available. To accommodate such opportunities, the Plan provides a mechanism to add facilities in the future. Appendix B includes the Petition to add a Processing/Disposal Facility in the Plan. The requirements for completing that process are also described. Each facility petitioning the County will be subject to the same criteria set forth in the original Request for Proposals met by the currently designated facilities. The inclusion of the facility must be approved by PADEP as a non-substantial plan revision.

RESOLUTION TO ADOPT THE PLAN REVISIONS

Upon completion of this Plan revision, the Erie County Council and the County Executive will adopt the revised Plan in the form of a resolution contained in Appendix F.

CHAPTER TEN

Impact of Policies and Programs

An extensive review of programs and services provided by both the public and private sectors, occurred during the planning process. Residential, commercial, institutional and government waste management practices were considered. Input was sought from a diverse group of stakeholders. Suggestions were offered to strengthen and expand or modify existing programs and services. This public participation process along with professional guidance and support offered assurances that policies resulting from the Plan were fair and reasonable. None of the recommendations are intended to interfere with existing contracts and business relationships.

There are no substantial changes in the current infrastructure anticipated as a direct result of the recommendations made in the Plan. However, if new technologies and opportunities present themselves within the next ten-years, the Plan allows for consideration and incorporation of those ideas and concepts.

Mutual Obligations and Commitments

As outlined in Act 101, the primary responsibility of Pennsylvania counties in the development of a municipal waste management plan is to secure sufficient disposal capacity. Because similar requirements exist in nearby states and throughout the nation, Erie County must be sensitive to the needs of other counties. While fulfilling its Act 101 obligations, Erie County has done nothing to obstruct other counties from obtaining disposal capacity commitments from the same facilities. In addition, the Erie County Municipal Solid Waste Management Plan has no negative effect on the ability of waste management facilities to function in the local marketplace.

EQUITABLE ACCESS TO AVAILABLE CAPACITY

Erie County has and will continue to utilize the services of existing transfer, processing and disposal facilities. Disposal and processing facilities operating both within Erie County and also in other counties and other states, receive waste from the County. Most of the facilities are owned and operated by the private sector, however, two are public sector operations. The use of multiple facilities allows for a fair and open market and provides sufficient capacity to the County. The same approach is commonly utilized in other county plans. Many of them use the same landfills as Erie County and in fact export their waste to the landfill located here.

The County respects the contractual obligations, which these facilities have to service counties other than Erie. In addition, Erie County understands that those same commitments create a need to design, finance, and construct reasonable expansions to meet the required capacity specifications. Therefore, Erie County does not interfere with the normal operational and regulatory process involved with such expansions. The County remains neutral regarding the lawful operation of these facilities and does not interfere or obstruct activities that generate the necessary profits to support those projects.

CHAPTER TWELVE

Stakeholder Input and Participation

To develop the Plan stakeholders from varying community sectors offered their perspectives and visions of how solid waste should be managed in the County. At scheduled meetings, these individuals discussed successes and shortcomings of previous initiatives. They reviewed current conditions that impact waste and recycling. Programs and service offerings that could be made available in the County were explored. Recommendations to enhance waste management at the County and municipal levels were offered. Additionally, the group identified political hurdles and anticipated public response to needed changes. All of these comments were weighed against the regulatory obligations and constraints of the Municipal Waste Planning, Recycling and Waste Reduction Act. In addition, public health and safety, economics and operational feasibility were evaluated.

The opinions and ideas of this group were incorporated into the final selection and justification of the programs in the Revised Plan.

REPRESENTATIVE MAKE-UP

The individuals appointed to form the Solid Waste Advisory Committee were each selected to fill a representative segment of Erie County. Some of the representatives qualified for more than one stakeholder group and therefore brought to the table a broader experience and understanding. Specific classes of the County's townships, boroughs and cities each had representation. The private waste and recycling industry, environmental interest groups, local business and industry, and educational interests all had voices on the committee. In addition, periodic visitors attended the meetings to offer input on various subjects.

DIRECTIVES

The Committee reached strong consensus that proper waste and recycling collection services, whether through municipal contracts or personal subscription should be an essential priority in every municipality. A commitment to educate municipal officials on the benefits of mandated collection and cooperative municipal contracting was stressed as a goal. Overall, the Committee agreed that increasing recycling in commercial establishments is necessary if the County is to meet its overall goals. Proper management of Household Hazardous Waste, E-Waste and Unwanted Pharmaceuticals was discussed and it was determined that the County could not continue to sustain the full costs of these programs. However, the need to ensure that such outlets would be available from other sources was deemed important. It was agreed that better information from transporters and processors of solid waste and recyclables was needed to establish benchmarks and make informed decisions in the future. Lastly, the need to support private development of food waste and construction & demolition waste recycling and composting efforts was considered essential. Therefore, the SWAC concluded that revisions to the Plan should focus on those goals.

MEETING CONTENT

Agendas and/or Minutes highlighting the topics and issues considered and discussed at the Solid Waste Advisory Meetings are located in Appendix E.

APPENDIX A

Disposal Capacity Procurement Process

**THE ERIE COUNTY DEPARTMENT OF PLANNING
ON BEHALF OF THE ERIE COUNTY COUNCIL
ERIE COUNTY PENNSYLVANIA
REQUESTS PROPOSALS FOR DISPOSAL/PROCESSING CAPACITY FOR
MUNICIPAL SOLID WASTE**

The Erie County Department Of Planning, in the process of updating the Erie County Municipal Solid Waste Management Plan, has determined that additional waste disposal or processing capacity for municipal solid waste (MSW), including construction/demolition (C/D) waste and sewage sludge generated within the County is required for a period beginning in 2014 and ending in 2024. In accordance with Pennsylvania Code Title 25. Environmental Protection. Chapter 272.225 Municipal Waste Planning Recycling and Waste Reduction (as amended December 22, 2000), the Erie County Department Of Planning on behalf of The Erie County Council is hereby soliciting proposals for disposal/processing capacity for MSW generated within the boundaries of Erie County Pennsylvania.

The Request for Proposals (RFP) will be available from the Erie County Department Of Planning, on or after December 9, 2013. There is a \$50 fee for printed copies. All proposals must be made on and inclusive of the required Proposal Forms and be in accordance with the Requirements for Submitting Proposals contained in the Request for Proposals. Proposers may withdraw their proposal at any time prior to the scheduled closing time for receipt of proposals. The Erie County Department Of Planning reserves the right to reject any or all proposals, to waive any irregularities and/or information in any proposal and to make an award in any manner, consistent with applicable laws, which is deemed to be in the best interest of the County. Contract approval and execution anticipated by March 2014.

Erie County Department of Planning will receive sealed proposals until 3:00 p.m., Prevailing Time on Wednesday, January 22, 2014. The Proposer is required to submit two (2) hard copies, each executed in blue ink and labeled "original," and two (2) "copies" formatted as MS Word or pdf files each on separate electronic media, CD-ROMs or Flash Drives. The proposals must be packaged, sealed, and clearly labeled to show the statement "Proposal Disposal Capacity" and the name and address of the Proposer.

Proposals should be submitted and be addressed to: the Erie County Department of Planning, Erie County Courthouse, Room 111, 140 West Sixth Street | Erie, PA 16501, Attention: Mr. Blakesley, Recycling Coordinator

THE ERIE COUNTY DEPARTMENT OF
PLANNING
ON BEHALF OF ERIE COUNTY

REQUEST
FOR
PROPOSALS

MUNICIPAL SOLID
WASTE DISPOSAL
AND PROCESSING
CAPACITY

2014 through 2023

Request Issued:
December 9, 2013

Proposals Due:
January 22, 2014

Erie County Department of Planning

Don Blakesley

Recycling Coordinator

Erie County Department of Planning

Erie County Courthouse, Room 111

140 West Sixth Street | Erie, PA 16501

dblakesley@eriecountygov.org

Project Consultant

Primary Contact for Proposal Related Questions

Michele Nestor

Nestor Resources, Inc.

Valencia, PA 16059

Phone: (724) 898-3489

Mobile: (724) 612-7675

Introduction

The Erie County Department of Planning on behalf of Erie County is accepting proposals for the disposal and processing of Municipal Waste generated within the County of Erie. Through this Request for Proposal, the County will select the disposal and processing methods and facilities to ensure disposal and processing capacity in accordance with the provisions of Act 101, the Pennsylvania Municipal Waste Planning, Recycling, and Waste Reduction Act of 1988. Act 101 mandates that each County must have secured disposal and processing capacity for the Municipal Waste generated within its boundary for a period of ten years. Those facilities entering into agreement with the County for secured capacity will be designated in the Municipal Solid Waste Management Plan of Erie County.

This document, which comprises the request for proposal, includes five sections:

1. Procurement Approach and Purpose
2. Evaluation Criteria
3. History and Background
4. Contract Provisions
5. Required Forms for Submission of Proposal

Sealed Proposals in response to this RFP are due on Wednesday, January 22, 2014, by 3:00 PM. To qualify for consideration, the Proposer must submit two (2) hard copies, each executed in blue ink and labeled “original,” and two (2) “copies” formatted as MS Word or pdf files each on separate electronic media, CD-ROMs or Flash Drives.

Erie County Department of Planning

Erie County Courthouse, Room 111

140 West Sixth Street | Erie, PA 16501

Attention: Mr. Blakesley, Recycling Coordinator

The outside of each sealed envelope must be marked “Proposal-Disposal Capacity.”

The Department of Planning intends to review and evaluate all proposals to determine which contractor(s) submitting proposals are deemed to serve the best interests of the County in meeting its needs for disposal and processing capacity in accordance with Act 101. The Department of Planning will consider only those facilities which have submitted qualified proposals. After the evaluation of the proposals is complete and based on the recommendations, which result from it, the County of Erie will execute the disposal and processing contract(s) with the selected contractor(s).

A contractor responding to this RFP shall be prepared to enter into a contract with the County to provide up to ten (10) years disposal and processing capacity for Municipal Waste generated within the County and to perform disposal and processing service in accordance with the conditions set forth in Section 4, Contract Provisions, of this RFP. The contractor shall operate a fully permitted disposal and processing facility which meets at a minimum the federal guidelines of Title 40--Protection of Environment CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY PART 257--CRITERIA FOR CLASSIFICATION OF SOLID WASTE DISPOSAL FACILITIES AND PRACTICES and PART 258--CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS as well as any design or operating criteria exceeding these standards required by the state and local governments in which the facility is located.

Under all alternatives and provisions described herein, the collection and transportation of waste is handled by municipal or private collection firms and is not a consideration in this proposal.

Section 1

Procurement Approach

Purpose of Request for Proposals

The County of Erie intends to comply with the specifications set forth in Act 101, the Pennsylvania Municipal Waste Planning, Recycling, and Waste Reduction Act of 1988, by securing sufficient disposal and processing capacity, which is both economically feasible and environmentally sound, for the Municipal Waste generated within the County's borders for a period of ten years.

County Designation of Facilities and Execution of Contracts

If the proposal is accepted by the County, one of the originals will be returned to the Contractor once it is executed by the County of Erie. The County anticipates that the proposals will be reviewed, accepted and contracts executed on or about April 1, 2014. The contract term will commence immediately upon execution by the County of Erie.

Pennsylvania Right-to-Know Law

If supporting information contained in the proposal is considered confidential, that information should be submitted under separate cover and clearly labeled "Confidential Information" on the cover along with the applicable law and/or regulation that supports the treatment of such information as confidential. The Proposal is subject to the Pennsylvania Right-to-Know Law ("RTKL") and therefore the County can make no guarantee that any material will remain confidential. The provisions set forth in the proposed Municipal Waste Disposal Service Contract attached hereto shall apply to this Proposal.

Requirements for Submitting Proposals

To be considered as a response qualified for review, proposals must meet the requirements set forth in this Section.

Proposals must be received by the date and time specified in the Introduction. Proposals received after the specified date and time will not be considered as a response qualified for review and will be returned unopened. The County of Erie reserves the right to reject any or all proposals, to request additional information or clarifications, to waive any irregularities and/or information in any proposal and to make an award in any manner, consistent with applicable laws, which is deemed to be in the best interest of the County.

Packages containing the proposals must be sealed and clearly labeled to show the name and address of the Proposer, the statement "Proposal-Disposal Capacity" and be addressed to: ***Erie County Department of Planning, Erie County Courthouse, Room 111, 140 West Sixth Street | Erie, PA 16501*** Attention: Mr. Don Blakesley, Recycling Coordinator

Proposals must be submitted in both print and electronic digital formats.

- Two printed and separately bound hard copies must be clearly marked "Original" and contain the forms, contract and certifications as indicated and be executed with original signatures in blue ink.

- Two (2) CD-ROMs or Flash Drives with each containing a copy of the proposal formatted as an MS Word or pdf file. Each “copy” must contain all of the required information, forms, contract and certifications. The electronic file must be saved to clearly identify the facility by name.

For Contractors proposing multiple facilities

- **Separate Hard Copies Required for Each Proposed Facility** the Contractor must submit two printed and separately bound hard copies clearly marked “Original” which contain the forms, contract and certifications as indicated and be executed with original signatures in blue ink.
- **Shared Electronic Media for All Proposed Facilities** Two (2) CD-ROMs or Flash Drives with each containing a copy of the proposal for each facility formatted as a pdf file. Each “copy” must contain all of the required information, forms, contract and certifications for each facility. An electronic file must be created for each facility, must be saved to clearly identify the facility by name. However the CD-ROM or Flash Drive may contain the files for all of the facilities submitted by the contractor.

Emergency Back-up Disposal and Processing

Contractors are required to identify a back-up facility(ies) in the event the proposed site exceeds its daily volume and/or for emergency closures.

- **Owner/Operated Back-up Facilities.** Intercompany facilities may not be identified simply by name to serve as back-ups for one another. Each facility must also submit a complete response to this RFP along with a signed contract.
- **Third Party Back-up Facilities.** A Contractor may fulfill the requirement for an emergency back-up facility by providing an agreement with a third party facility that has submitted a proposal package.

**CAREFULLY READ THE DESCRIPTIONS AND INSTRUCTIONS FOR EACH OF THE SECTIONS LISTED.
AVOID SUBMITTING MORE INFORMATION AND DOCUMENTATION THAN THE RFP REQUESTS OR REQUIRES.
PLEASE Expedite The Submission/Review Process and Save Yourself Time And Expense By**

Organization of the Proposal

The proposal must consist of the following information organized into sections. **Each section must be in the order shown below, separated by clearly labeled tabs/dividers:**

1. Cover Letter
2. Statement of Qualifications
3. Experience and Qualifications of Managers and Supervisors
4. Compliance History
5. Certificate of Permit
6. Facility Design and Operational Plan
7. Permitted Volumes in Tons, Operating Hours and Performance Guarantee
8. Current Available Permitted Capacity in Cubic Yards
9. Financial Assurances
10. Completed and Signed Contract
 - a. Cost of Processing and Disposal
 - b. Reserved Capacity
11. Representations and Certifications
12. Contractor Information

Cover Letter and Signature Requirements

A cover letter, which is addressed to the County of Erie must accompany each proposal. The cover letter shall commit the contractor, if selected, to carry out all of the provisions of the proposal. It shall state that all information submitted and represented both in the proposal and in support of the proposal is accurate and factual. The letter shall designate by name and title the key technical and business representatives who, if the contractor is selected, will negotiate with the County.

An officer of the organization submitting the proposal empowered and authorized to sign such documents shall sign the cover letter. The same individual signing the cover letter shall sign the disposal and processing capacity contract and all forms in the proposal requiring signatures. Two copies of the proposal document must be clearly marked as the original and contain the original forms, the disposal and processing capacity contract and cover letter. **The original forms, the disposal and processing capacity contract, and the cover letter shall be submitted as printed hard copy and signed in "Blue" ink.**

The other copies shall be submitted as electronic media, (CD-ROMs or Flash Drives) in MS Word or pdf format with each file saved to include and clearly identify the name of the facility.

Statement of Organization's Qualifications

The organization submitting the proposal shall provide sufficient information to demonstrate and prove experience, skill, management, and resources required to provide consistent, reliable, and legal disposal and processing facilities to Erie County. A list of the counties currently contracting with the facility for disposal and processing capacity shall be included. A list of the municipalities with which the facility has secured host agreements shall be included. Experience in the successful operation of disposal and processing facilities shall be documented. **This section should be limited to 5 pages of text or printed material.**

Experience of Managers and Supervisors

Experience and qualifications of the management team directly responsible for the day-to-day operation of the facility proposed to accept waste shall be documented. This section should include a list of the site's management personnel and for each a detailed description of their industry experience, training, and responsibilities.

Facility Compliance History

A compliance history shall be provided for the **facility** submitting the proposal, which covers the most recent ten-year period, or if in operation less than ten years, for the length of its operating term. The history must be inclusive of Federal, State and Local Environmental Protection Acts and Regulations including but not limited to those concerning Solid Waste Management, Air Quality, Water Quality, Water Supply, Surface Mining, Oil and Gas Management, Dam Safety and Encroachment, Conservation and Reclamation.

The compliance history must list any permit or license denial, suspensions, or revocations; any notices of violations; any administrative orders, consent agreements or adjudications issued or civil penalties assessed by Federal State or Local Regulatory Agencies. The dates and resolutions for each item listed must be included. The organization submitting the proposal must describe any summary, misdemeanor, or felony convictions and pleas of guilty and no contest obtained against the organization both within the Commonwealth of Pennsylvania and also outside of its borders. The description shall include the date, location nature, and disposition of each stated action.

Organizations may submit a copy of **PADEP Form HWC, Compliance History, (not Form C-1)** in lieu of a written description of the compliance history. Facilities located in other states that require completion of a similar document may submit it in lieu of a written description provided that document includes all of the information required in this section.

Certificate of Permit

A copy of the approved current operating permit, **with the current pending expiration date clearly shown**, shall be submitted for the organization's facility proposing to accept waste. Copies of approvals for any addendums or revisions approved since its issuance by the State Regulatory Agency with direct oversight for the facilities operation.

Facility Design and Operational Plan

The organization submitting the proposal shall provide a short description of the disposal and processing facility it intends to utilize in response to this RFP.

Responses should be clear and informative without being encyclopedic. Please submit no more than four pages of narrative to describe the design, its components and the operations plan.

Pennsylvania Facilities should not include the full Form14 from their permit application. Please provide only short excerpts to demonstrate each point.

All facilities must include in their descriptions: (a paragraph or two describing the general procedural mechanism will be sufficient to address each item. It is not necessary, or desirable, to have the complete description from the facility's permit included)

- ✓ the name and location of the facility (including the names of the municipalities in which it is physically located),
- ✓ a brief outline of its operating plan for the life of the facility including post closure care,
- ✓ a brief description of the daily record keeping procedures and measurement of waste,
- ✓ a brief outline of its waste acceptance and monitoring program, and also
- ✓ its environmental emergency response plan.

Requirements unique to the type of facility:

- ✓ a landfill shall submit a brief description of its liner system, methane recovery and utilization and method of leachate control, monitoring, and treatment, , (on-site/off-site).
- ✓ Other types of disposal and processing facilities shall include a detailed description of the technology and equipment utilized to process Municipal Waste, the byproducts of the process and methods of handling the byproducts.

Design drawings are not required in the proposal, but the County reserves the right to request such information during the review and/or selection process.

Permitted Volumes and Operating Hours and Performance Guarantee

The current permitted average and maximum daily, yearly, and life-of-permit tonnage limits shall be listed for the organization's disposal and processing facility utilized in response to this RFP.

The hours that facility is permitted to accept waste shall be listed.

The organization submitting the proposal shall also outline the preferred procedures for accepting an excessive amount of waste resulting from a natural disaster or other emergency in the County at the facility it intends to utilize in response to this RFP.

In addition, a contingency plan for accepting waste outside of the normal operating hours or during emergency or temporary closure of the disposal and processing facility shall be

included. The method by which uninterrupted disposal and processing service will be provided to Erie County in the event that an emergency or other uncontrollable circumstance precludes the use of the facility shall be included. **Back-up facilities for this purpose must also submit a response to this RFP along with a signed contract. If not submitting a multi-facility proposal, the Contractor may fulfill the requirement for an emergency back-up facility by providing an agreement with a third party facility that has submitted a proposal package.**

Available Capacity (Airspace or Burner Capacity)

The facility proposing to accept waste must prove and document both its most current annual and also its most current quarterly airspace usage and available capacity in cubic yards based on its existing permitted status. **Pennsylvania landfills should submit Page 1 of the PADEP Annual Operations Report, which requires the facility to calculate the available airspace in cubic yards. Resource Recovery Facilities should demonstrate the daily throughput capacity and burner design.**

Should the facility's current available permitted capacity be less than ten years, the organization submitting the proposal shall include narrative detailing provisions for providing disposal and processing capacity beyond the fixed terms of the permit. Options for expanding capacity shall be consistent with the current Federal, State and Local laws and regulations.

Financial Assurances

The organization must submit in the proposal the following proof of sufficient financial responsibility for the operation of the facility:

- ✓ a certificate of pollution liability and public liability insurance; and
- ✓ the closure/post closure bonding requirements /worksheets of the facility with the type of security, dollar amount, terms, conditions, and limits stated.

The following information would be provided later, and only upon request:

Upon request, the organization must also demonstrate sufficient financial resources to carry out the responsibilities as outlined in this RFP and to back up the contractual obligations. Proof of financial resources must be provided upon request either at the time the contractor is selected or at the time that the disposal and processing capacity contract is executed.

Proof of sufficient financial resources will be in the form of complete audited financial statements for the most recent three years of continuing operation. If the organization submitting the proposal is a joint venture, subsidiary, or partnership, the financial information must be supplied for the parent company and the parent company must state its willingness to guarantee such joint venture, subsidiary, or partnership throughout the term of the disposal and processing services contract.

Signed Contract

The organization submitting the proposal shall complete and submit the signed Contract guaranteeing disposal and processing capacity. The same person authorized to submit the proposal shall sign the contract **in blue ink**.

Contract Form A-Cost of Processing and Disposal

The organization submitting the proposal shall submit a Form A as provided in the Contract Agreement. The same individual signing the cover letter shall sign the completed form, which must be included with the signed contract with the proposal. The method of price adjustment, if any, over the contract period must be explained and demonstrated with the Form. The tipping fee must include any and all Act 101 or host municipality fees or surcharges, which should also be outlined and described.

Contract Form B- Reserved Capacity

The organization submitting the proposal shall submit a Form B as provided in the Contract Agreement. The same individual signing the cover letter shall sign the completed form, which must be included with the signed contract with the proposal. The capacity reserved shall be specified in tons, and percentage on an annual basis and by tons on a daily basis. The number of operating days each year the facility is available to accept waste must be specified.

Additional Required Forms

Form C- Representations and Certifications

The organization submitting the proposal shall submit a Form C as provided in this RFP. The same individual signing the cover letter shall sign the completed form, which must be included with the proposal.

Form D -Contractor Information

The organization submitting the proposal shall submit a Form D as provided in this RFP. The same individual signing the cover letter shall sign the completed form, which must be included with the proposal.

Section 2

Evaluation Criteria

The County will utilize the following criteria in evaluating and ranking proposals submitted in response to this RFP. There is no significance or correlation to the order in which the items are listed and the value or importance each has in the selection criteria

Financial Stability

Contractors will be evaluated on the basis of their overall financial strength and credit worthiness as well as their public and environmental liability protection as an indication of their ability to establish and maintain a financially sound disposal and processing system. Financial assurances for closer and post closure care are important.

Regulatory Compliance

Contractors will be evaluated on their overall compliance history with attention given toward severity of violations, consistency of violations and most importantly, the demonstrated resolution and disposition of any such incidents.

Operating Permit Status and Capacity

Contractors will be evaluated on the current status, terms, and conditions of the facility's operating permit as well as the life expectancy of the facility and its available capacity as an indication of its ability to provide adequate disposal and processing service for the needs outlined by the County in this RFP. **Facilities without a currently approved permit should not submit a proposal. If and when a permit is issued, those facilities may petition the County at that time for inclusion in the Plan.**

Technical Design and Operational Plan

Contractors will be evaluated on the effectiveness of the facility's design and overall operation to provide a sound and reliable environmental solution to the County's disposal and processing needs as well as its ability to meet Federal, State and Local regulatory standards for municipal solid waste management. Issues such as leachate collection and treatment, methane recovery and utilization, ash management, ground water monitoring systems, waste acceptance plans and radiation monitoring are considered important.

Solid Waste Management Experience

Contractors will be evaluated on their demonstrated management experience in the successful operation of the proposed disposal and processing technology or process and their demonstrated successful performance in providing disposal and processing services through other county and municipal contractual.

Minimum and Maximum Waste Volume Expectation

Contractors will be evaluated on their ability to accept all or some of the municipal solid waste generated by Erie County on a daily and annual basis for a period covering ten years along with no minimum guarantees of waste required from the County. Facilities need not commit to 100% of the County's capacity needs. However, the facilities must be capable of providing the capacity

which they propose. “Put or Pay” (as defined below) contract requirements will be objectionable to the County as they are viewed as providing disincentives to recycling.

Tipping Fees and Annual Costs

Contractors will be evaluated based on their compliance with providing a maximum cost charged per ton for the disposal and processing service including any and all fees and surcharges resulting from Act 101, host municipality agreements or other federal or state statutes, and local ordinances and resolutions. The maximum cost per ton may not exceed the facility’s published gate rates. The total annual cost to the County, if any, to construct, operate or otherwise invest in a proposed processing and disposal facility must be provided in detail and will also be a critical part of the evaluation.

Based upon these criteria, the contractor(s) will be selected. The County of Erie reserves the right to enter into agreements with any or all of the parties that submitted complete responses on the date and time required by the RFP.

Section 3

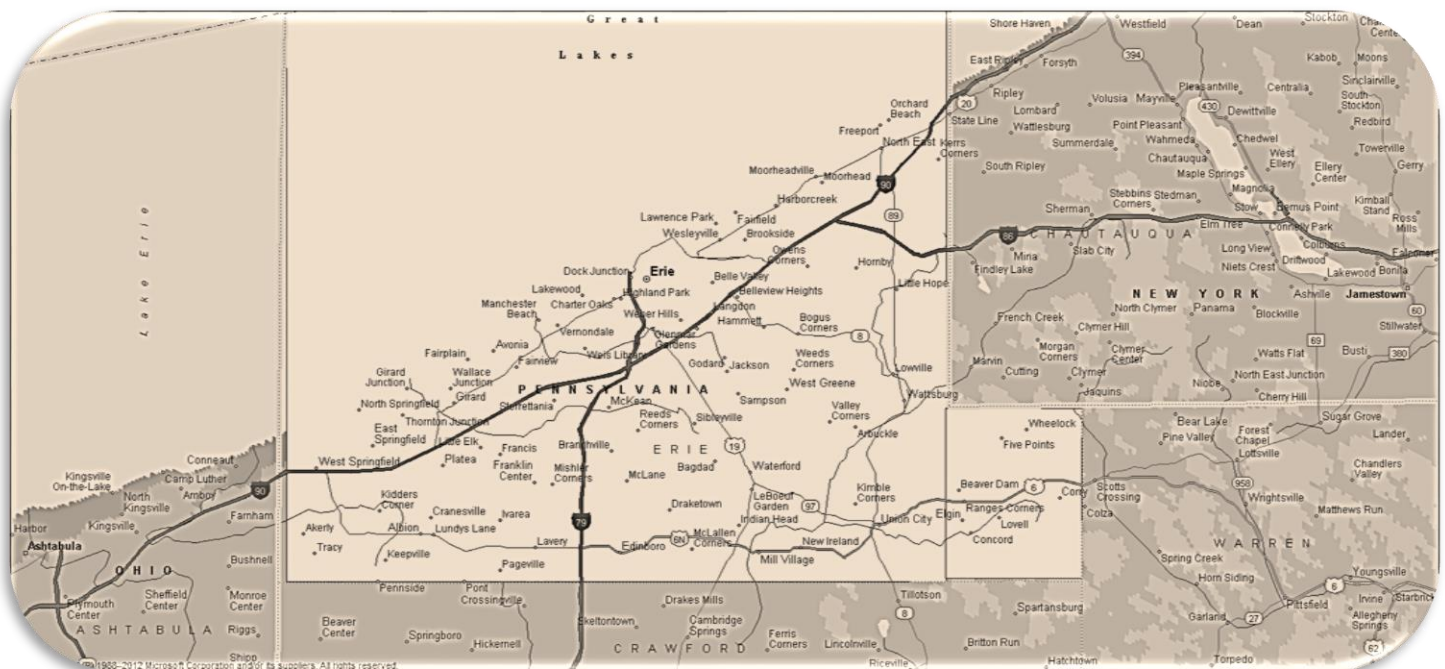
Erie County Background Information

Location and General Characteristics

Erie County is located in the upper most corner of northwest Pennsylvania. In total area, Erie County is considered the largest county in Pennsylvania. However, over 48% of the County's area is water as its boundaries extend into Lake Erie., and thus border Canada to the north. Erie County is bordered on the northeast by Chautauqua County, New York, on the east by Warren County, on the south by Crawford County, and on the west by Ashtabula County, Ohio. Interstates 79, 90, and 86 intersect in the County and provide perfect gateways to the County east to west and south to north.

Erie County is classified as a third class county governed by Home Rule Charter. The City of Erie is the county seat. Together with the surrounding townships of Millcreek, Summit, Fairview, and Harborcreek, the Erie urban area is the largest concentration of population in the County. Considerable portions of the County still remain rural.

Figure 1 General Location of Erie County, Pennsylvania



Current Processing And Disposal Practices

Six landfills were designated to receive waste from Erie County in the 2005 Municipal Solid Waste Management Plan Update. One of those landfills has since closed. The existing processing and disposal agreements are at or near expiration. It is anticipated that on or around April 1, 2014 new contracts will be executed with qualified facilities, based on the content of this RFP, for a term of ten years. Haulers and transfer stations are required by ordinance to use any of the designated facilities. The County intends to follow this same approach.

Logistics and practicality have influenced the actual flow of waste more than any ordinance. Nearly all of Erie County's municipal waste is disposed at Lakeview Landfill, which is located within the County. Seneca Landfill, located in Butler County receives most of the remainder of Erie County's municipal waste. Seneca receives the waste via the Tri-County transfer station located in Mercer County. No guarantees, or put or pay provisions, were made by Erie County for minimum waste volumes to be delivered for processing and disposal as part of any of the existing agreements.

Projected Landfill Capacity Requirements

This section presents the estimated future disposal capacity required for Erie County. It is based on current reported disposal quantities with some adjustments made to correct for suspected reporting errors. The projections allow for possible future changes in the rate of MSW generated per capita, and projected changes in population.

Population. The Erie County Long Range Transportation Plan projects population changes through the year 2040. The projections, issued by the Erie County Planning Department, are based on past census data and other factors. The projections are shown on Table 1. Over the period 2010 through 2040, the population of Erie County is projected to increase by 3.38%.

Table 1. Erie County Population Projections: 2010-2040

	2010	2020	2030	2040	% Change	% Change	% Change
	Census	Projection	Projection	Projection	2010- 2020	2010- 2030	2010- 2040
Totals	280,566	282,495	285,505	290,063	0.69%	1.76%	3.38%

Estimated Future Generation Rate for MSW. The USEPA reports on national MSW generation and disposal rates. In recent years, the generation rate per capita has been about 0.85 tons/person/year with little variation. Thus, for projection purposes, it was assumed that per capita generation rates will remain unchanged.

Table 2 presents projected disposal capacity requirements for the years 2013 through 2040. The figures are based on a constant per capita generation rate with adjustments due to projected population changes.

Table 2. Projected Landfill Capacity Requirements Erie County

2013 through 2040 in Tons

Year	Population	MSW	Sludge	C&D	Total
2013	281,145	148,638.9	12,507.3	34,075.2	195,221.4
2014	281,338	148,740.9	12,515.9	34,098.6	195,355.4
2015	281,531	148,842.8	12,524.5	34,122.0	195,489.3
2016	281,723	148,944.8	12,533.1	34,145.4	195,623.3
2017	281,916	149,046.8	12,541.6	34,168.7	195,757.2
2018	282,109	149,148.8	12,550.2	34,192.1	195,891.1
2019	282,302	149,250.8	12,558.8	34,215.5	196,025.1
2020	282,495	149,352.8	12,567.4	34,238.9	196,159.0
2021	282,796	149,511.9	12,580.8	34,275.4	196,368.0
2022	283,097	149,671.0	12,594.2	34,311.8	196,577.1
2023	283,398	149,830.2	12,607.6	34,348.3	196,786.1
2024	283,699	149,989.3	12,621.0	34,384.8	196,995.1
2025	284,000	150,148.5	12,634.3	34,421.3	197,204.1
2026	284,301	150,307.6	12,647.7	34,457.8	197,413.1
2027	284,602	150,466.7	12,661.1	34,494.3	197,622.1
2028	284,903	150,625.9	12,674.5	34,530.7	197,831.1
2029	285,204	150,785.0	12,687.9	34,567.2	198,040.1
2030	285,505	150,944.1	12,701.3	34,603.7	198,249.1
2031	285,961	151,185.1	12,721.6	34,658.9	198,565.6
2032	286,417	151,426.1	12,741.9	34,714.2	198,882.1
2033	286,872	151,667.1	12,762.1	34,769.4	199,198.6
2034	287,328	151,908.0	12,782.4	34,824.7	199,515.1
2035	287,784	152,149.0	12,802.7	34,879.9	199,831.6
2036	288,240	152,390.0	12,823.0	34,935.2	200,148.1
2037	288,696	152,631.0	12,843.2	34,990.4	200,464.6
2038	289,151	152,872.0	12,863.5	35,045.6	200,781.1
2039	289,607	153,112.9	12,883.8	35,100.9	201,097.6
2040	290,063	153,353.9	12,904.1	35,156.1	201,414.1

Section 4

Capacity Agreement

The following Contract/Agreement shall be executed between the County of Erie and the Contractor. The contract signed in BLUE ink must be included in the Contractor's two ORIGINAL proposals with reproductions in the remaining three electronically formatted copies. The contract shall become effective on the date the agreement is signed by the Erie County Executive

MUNICIPAL WASTE PROCESSING AND DISPOSAL SERVICE CONTRACT

THIS MUNICIPAL WASTE PROCESSING AND DISPOSAL SERVICE CONTRACT (hereinafter referred to as the "Contract") entered by and between THE COUNTY OF ERIE , Erie, Pennsylvania, hereinafter jointly referred to as the "County" AND

(Name of Facility/Parent Company)

hereinafter referred to as the "Contractor" whose permitted processing and disposal facility Permit No _____ issued by _____ is located in

_____ (Municipality)(ies),
_____ County, _____ State.

WITNESSETH:

WHEREAS, the County of Erie, acting through the Erie County Department of Planning, have developed and adopted the 1990 Municipal Waste Management Plan for Erie County and its revisions in 1995, 2005, and 2014 in accordance with the requirements of the Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 ("Act 101"); and,

WHEREAS, the municipalities in Erie County have duly approved and ratified this 1990 Municipal Waste Management Plan for Erie County pursuant to the requirements of section 501 of Act 101; and,

WHEREAS, this 1990 Municipal Waste Management Plan for Erie County and its revisions in 1995, 2005 and 2014 requires that all Municipal Waste generated within Erie County must be disposed only at a Municipal Waste processing and disposal facility that is designated by the County pursuant to this plan to insure the availability of adequate permitted processing and disposal capacity for the Municipal Waste generated in Erie County; and

WHEREAS, Act 101, requires the County, as part of its plan, to provide for assurance for capacity or the processing and disposal of all Municipal Waste expected to be generated within the County for a period of at least the next ten (10) years, and further requires the County to execute and submit to the Department, contracts evidencing the implementation of its approved Plan and insuring sufficient available processing or disposal capacity; and,

WHEREAS, the Contractor wishes to be designated by the County as one of the Municipal Waste processing or disposal facilities where the Municipal Waste generated within Erie County must be disposed; and,

WHEREAS, the Contractor is willing to guarantee the availability of adequate, permitted processing or disposal capacity for such waste and the costs for such services for a ten-year contract period in exchange for such designation by the County; and,

WHEREAS, the County and the Contractor now desire to enter into this Contract in order to effectuate the goals of the Municipal Waste Management Plan for Erie County and to further set forth the agreements between the parties with respect thereto;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and pursuant to the parties' intent to be legally bound under the Uniform Written Obligations Act, 33 Pa.C.S. § 6, the undersigned hereby agrees as follows:

I. DEFINITIONS

Unless the context clearly indicates otherwise, the following words and terms, as used in this Contract, shall have the following meanings:

Acceptable Waste -Waste that Contractor is permitted to manage, process, store and/or dispose at the Landfill, in accordance with its Permit for a Solid Waste Processing and Disposal Facility, which was issued by the Pennsylvania Department of Environmental Protection ("DEP") or the equivalent regulatory agency in the state where the facility is located and under applicable Pennsylvania law or that in which the facility is located, including, but not limited to, the Pennsylvania Solid Waste Management Act and the rules and regulations promulgated thereunder; and waste which is not inconsistent with the Facility's Waste Acceptance Policy as defined herein.

Act 101 - The Pennsylvania Municipal Waste Planning Recycling and Waste Reduction Act of 1988.

Affiliate Any individual or entity that controls, is controlled by, or is under common control with a party to this Contract, or in the case of a sole proprietor, any blood relative or employee of the contractor, as designated by this Contract.

Bulky Waste (White Goods) -Large items of Refuse, including, but not limited to, appliances, furniture, auto parts, trees, branches or stumps which may require special handling due to their size, shape or weight.

Commercial Waste -All solid waste originating from commercial establishments engaged in non-manufacturing or non-processing business, including, but not limited to, stores, markets, office buildings, restaurants, shopping centers and theaters.

Construction Demolition Waste – Municipal Solid waste resulting from the Construction or Demolition of buildings and other structures, including, but not limited to, wood, plaster, metals, asphaltic substances, bricks, block and unsegregated concrete.

Contract -The Municipal Waste Processing and Disposal Service Contract, between the County and the Contractor.

Contractor -The Facility and Parent Company identified as such on the first page of this contract or any permitted successors, assigns, or affiliates.

County -The County of Erie, Pennsylvania, acting by and through the Erie County Executive, the Erie County Council and the Department of Planning or their designated representative.

Department of Planning – An agency of Erie County Government delegated with the responsibility of developing and implementing the Erie County Municipal Solid Waste Management Plan and associated programs and services.

Department or DEP -The Pennsylvania Department of Environmental Protection (DEP).

Domestic or Residential Waste -Solid waste comprised of Garbage and Rubbish, which normally originates from residential private households or apartment houses.

Erie County- a third class county located in the Commonwealth of Pennsylvania

Facility—Land, structures and other appurtenances or improvements where municipal waste processing and disposal is approved and permitted to occur under Federal and state law. A Facility includes a landfill, a resource recovery facility, a waste-to-energy facility, a digester and/or other municipal solid waste processing and disposal technologies operating under the provisions of a permit approved and issued by the Pennsylvania Department of Environmental Protection or the state regulatory agency in which the operation is located.

Garbage -Putrescible animal or vegetable wastes resulting from the handling, preparation, cooking, serving or consumption of food and food containers.

Hauler and Waste Collector -Any person, firm partnership, association or corporation, including any municipality, engaged in the business of collecting and transporting municipal solid waste to processing or disposal facilities.

Hazardous Waste -A solid waste or combination of solid wastes which, because of its quantity, concentration or physical, chemical or infectious characteristics may: (1) cause or significantly contribute to an increase in mortality or an increase in morbidity in either an individual or the total population; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed or otherwise managed; or (3) is otherwise defined as "hazardous" by any Federal or State statute or regulation.

Industrial Waste -Solid waste resulting from manufacturing and industrial processes, including, but not limited to, those carried out in factories, foundries, mills, processing plants, refineries, mines and slaughterhouses.

Institutional Waste Solid waste originating from institutions including, but not limited to, public buildings, hospitals, nursing homes, orphanages, schools and universities.

Landfill -The Contractor's permitted landfill identified on the first page of this contract.

Leaf Waste -Leaves, garden residues, shrubbery and tree trimmings, and similar material, but not including grass clippings.

Municipal Recycling Program A source separation and collection program for recycling Municipal Waste, or a program of designated drop-off points or collection centers for recycling Municipal Waste, that is operated by or on behalf of a municipality .The term shall include any source separation and collection program for composting leaf waste that is operated by or on behalf of a municipality. The term does not include any program for recycling construction and demolition waste or sludge from sewage treatment plants or water supply treatment plants.

Municipality -Any city, borough, incorporated town, township or county or any municipal authority- created by any of the foregoing.

Municipal Waste or Solid Waste -Garbage, Refuse, industrial lunchroom or office waste and other material, including solid, liquid, semi-solid or contained gaseous material, (but excluding

Hazardous Waste) resulting from operation of residential, municipal, commercial or institutional establishments or from community activities; and any sludge not meeting the definition of residual or hazardous waste from a municipal, commercial or institutional water supply treatment plant, wastewater treatment plant or air pollution control facility. The term does not include source separated recyclable materials or material approved by DEP for beneficial use.

Operator Any person or municipality that operates a municipal solid waste processing or disposal facility.

Owner - The person or municipality who is the owner of record of a solid waste processing or disposal facility.

Permit -A permit issued by the Pennsylvania DEP to operate a Municipal Waste disposal, processing or transfer station facility.

Permit Area -The area of land and water within the boundaries of the permit, which is designated on the permit application maps as approved by the Pennsylvania DEP, or equivalent regulatory agency in the state in which the facility is located.

Proposal – Complete response to the Request for Proposals for Municipal Waste Processing and Disposal Services that was submitted by Contractor to the County.

“Put or Pay” - A requirement to guarantee delivery of predetermined quantities of waste to a facility which also requires payment to the facility regardless of whether or not the waste was delivered for processing and disposal.

Recycling - The collection, separation, recovery and sale or reuse of metals, glass, paper, leaf waste, plastics and other materials which would otherwise be disposed or processed as Municipal Waste.

Refuse -Discarded waste materials in a solid or semi-liquid state, consisting of Garbage, Rubbish or a combination thereof.

Remaining Permitted Capacity -At any time the remaining weight or volume of Municipal Waste that can be disposed at a permitted Municipal Waste disposal or processing facility. The term shall only include the weight or volume capacity for which the Pennsylvania DEP (or the equivalent regulatory agency in state which the facility is located) has issued a permit.

Residual Waste -Any Garbage, Refuse, other discarded material or other waste, including solid, liquid, semi-solid or contained gaseous material resulting from industrial, mining and agricultural operations and any sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous.

Resource Recovery Facility -A facility that provides for the extraction and utilization of materials or energy from Municipal Waste that is generated off-site, including, but not limited to, a facility that mechanically extracts materials from Municipal Waste, a combustion facility that converts the organic fraction of Municipal Waste to usable energy and any chemical or biological process that converts Municipal Waste into a fuel product or other usable material. The term does not include methane gas extraction from a Municipal Waste landfill, nor any separation and collection center, drop-off point or collection center for recycling Municipal Waste, or any source separation or collection center for composting leaf waste.

Rubbish -Non-putrescible solid wastes consisting of combustible and non-combustible materials including leaf wastes.

Sewage Sludge -The coarse screenings, grit and dewatered or air-dried sludges, septic and holding tank pumpings and other residues from municipal and residential sewage collection and treatment systems.

Stabilized Sewage Sludge -Sewage sludge that has been treated to reduce odor potential and the number of pathogenic organisms. Treatment methods include anaerobic and aerobic digestion, composting, lime stabilization and chlorine stabilization.

Tipping Fee -The schedule of fees established by the owner or operator of a transfer station, sanitary landfill, processing and/or resource recovery facility for accepting various types of solid waste for processing or disposal.

Unacceptable Waste -Any material that by reason of its composition, characteristics or quality, is ineligible for disposal at the processing and disposal facility pursuant to the provisions of the Resource Conservation and Recovery Act of 1976, 42 U.S.C. S2605 (e), the Pennsylvania Solid Waste Management Act, 35 P.S. S6018.101, et seq., or other applicable Federal, State or local law; or any other material that the Contractor concludes would require special handling or present an endangerment to the landfill, the public health or safety, or the environment.

II. SCOPE OF CONTRACT

1. Designation as Processing and Disposal Site

In consideration of Operator's Covenants and this Agreement, the County hereby agrees to include operator's Facility in its Plan as a designated non-exclusive processing or disposal facility for Municipal Waste generated in the County.

2. Effective Date

This Contract shall become effective and the contractor shall begin providing Municipal Waste processing and disposal, service for the County under the terms and conditions of this Contract on the date the Contract is duly executed by the County Executive.

3. Term of contract

The term of this Contract shall commence on the effective date, and shall terminate on the earlier of (a) any event, the effect of which is to permanently terminate the validity of the DEP Permit for the Facility (or the equivalent regulatory agency in state which the facility is located) or (b) Ten (10) years, or (c) terminated in writing by consent of both parties.

4. Compliance with Applicable Laws

The parties to the Contract agree that the laws of the Commonwealth of Pennsylvania shall govern the validity, construction, interpretation and effect of the Contract. The Contractor shall conduct the service of Municipal Waste processing and disposal as provided by for by the Contract in compliance with all applicable federal and state regulations and laws. The contract and the work to be performed as described herein is also subject to the provisions of all

pertinent municipal ordinances which shall be made a part thereof with the same force and effect as if specifically set out therein.

5. Breach of Contract

If the Contractor fails to materially perform in a satisfactory manner in accordance with applicable Permit requirements or regulations the County shall have the right to demand in writing adequate assurances from the Contractor that steps have been or are being taken to rectify the situation. Within ten (10) days of receipt of any such demand the Contractor must submit to the County a written statement that explains the reasons for the non-performance or delayed, partial or substandard performance during that period and any continuance thereof. The Contractor shall also have the option to appear before the County to present any such explanation. Upon the failure of the contractor to submit a statement or failure of the Contractor to correct any such condition within fifteen (15) days after responding to the demand by the County, unless the County has agreed to a longer period (which agreement will not be unreasonably withheld), the County may, except under the conditions of force majeure, as defined herein, assess liquidated damages to the Contractor in accordance with the provisions stated herein and/or to terminate the Contract, and as a remedy make demands under any remedy available to the County as provided by law.

6. Penalties and Actual Damages

A. It is hereby understood and mutually agreed by and between the Contractor and the County that the Municipal Waste processing and disposal services to be performed under this Contract are vital for the protection of public health and welfare *and* it is further understood and agreed that the services to be performed under this Contract will be commenced on the date specified in this Contract.

B. It is hereby understood and mutually agreed by and between the Contractor and the County that reporting of complete and accurate data in the format required by this Contract is vital to evidence the implementation of Erie County's approved Plan and the continued availability of sufficient processing or disposal capacity *and* it is further understood and agreed that the reports to be submitted under this Contract in the format required will be received by the County on the dates specified in this Contract.

1. A Contractor that operates, or whose parent company operates, a transfer station that receives Erie County municipal waste for transport to one of the designated facilities shall also submit a report from the transfer station in accordance with Section IV.

C. If the Contractor neglects, fails or refuses to provide the Municipal Waste processing and disposal services in accordance with the terms and provisions of the Contract, and as a result thereof there is a disruption or termination of the Municipal Waste processing and disposal services to be performed by Contractor under this Contract, then the Contractor does hereby agree, as a partial consideration for the awarding of the Contract, to pay to the County an amount to be determined as hereinafter set forth as actual damages for such breach of Contract for each and every calendar day that such service is disrupted or terminated.

D. The amount of actual damages shall be equal to any additional total waste processing and disposal cost (i.e., any processing and disposal cost in excess of the amount that haulers normally would have paid for processing and disposal of the same amount of waste at the Contractors' Facility under the contract), if any, plus any additional total waste transportation

costs (i.e., any transportation cost in excess of the amount that haulers normally would have paid for transporting the same amount of waste to the Contractors' Facility) if any, that the haulers have incurred for transportation and processing and disposal of the Municipal Waste to an alternative processing or disposal facility or transfer station.

E. The Contractor shall not be responsible for the payment of any actual damages whenever the County determines that the Contractor was without fault and the Contractor's reasons for the breach of Contract are acceptable. Furthermore, the Contractor shall not be responsible for any actual damages under the conditions of force majeure as defined herein.

F. If the Contractor neglects, fails or refuses to provide the complete and accurate reports in the format required by the County in accordance with the terms and provisions of Section IV of the Contract, then the Contractor does hereby agree, as a partial consideration for the awarding of the Contract, to pay to the County an amount to be determined as hereinafter set forth as penalties for such breach of Contract for each and every calendar day that such reports in the format required by the County are late, incomplete, inaccurate or insufficient.

G. The amount of penalties shall be calculated at the rate of \$300 per day for each and every calendar day past the required date for submission. If more than one report required in Section IV of the Contract is to be submitted on the same calendar day then the amount of penalties shall be calculated separately for each and every report that is late, incomplete, inaccurate or insufficient or improperly formatted.

7. Force Majeure

Neither the Contractor nor the County shall be liable for the failure to perform their duties and obligations under the Contract or for any resultant damages, loss or expense, if such failure was the result of an act of God, riot, insurrection, war, catastrophe, natural disaster or any other cause which was beyond reasonable control of the Contractor or the County and which the contractor or County was unable to avoid by exercise of reasonable diligence.

8. Assignment of Contract

No transfer or assignment of the Contract or any right accruing under the Contract shall be made in whole or in part by the Contractor without prior express written approval by the County (which approval shall not be unreasonably withheld). The delegation of any Contract duties will require the written consent of the surety for the Contractor's performance bond, since such delegation will not relieve the Contractor or his surety of any liability and/or obligation to perform. In the event of any delegation of a duty, the delegate shall assume full responsibility and liability for performance of that duty without affecting the Contractor's liability, and shall be responsible for compliance with and performance of all terms and conditions of this contract including but not limited to provisions for sureties and assurances of availability of 10-year service.

9. Change of Ownership

In the event of any change of control or ownership of the Contractor's Facilities the County shall maintain the right to hold the original owner solely liable. However, the County, at its option may determine that the new ownership can adequately and faithfully perform the duties and obligations of the Contract for the remaining term of the Contract, and elect to execute a novation, which will allow the new ownership to assume the rights and duties of the Contract and

release the former ownership of all obligations and liabilities. The new ownership would then be solely liable for the performance of the Contract and any claims or liabilities under the Contract.

10. Waivers

A waiver by either party of any breach of any provisions of the Contract shall not be taken or held to be a waiver of any succeeding breach of such provisions or as a waiver of any provision itself. No payment or acceptance of compensation for any period subsequent to any breach shall be deemed a waiver of any right or acceptance of defective performance.

11. County's Obligations

County shall not be obligated by the terms of this Contract to guarantee the delivery to Contractor's Facility of any minimum quantities of Municipal Waste or payment for any services provided by Contractor to any hauler.

12. Illegal and Invalid Provisions:

In the event any term, provision or other part of the Contract should be declared illegal , inoperative, invalid or unenforceable such term or provision shall be amended to conform to the appropriate laws or regulations. In the case of illegal or invalid provisions, the remainder of the Contract shall not be affected and shall remain in full force and effect.

13. Joint and Severable Liability

If, after the date hereof, the Contractor is comprised of more than one individual, corporation or other entity, each of the entities comprising the Contractor shall be jointly and severally liable.

14. Binding Effect

The provisions, covenants and conditions of the Contract shall apply to and bind the parties, their legal heirs, representatives, successors and assigns.

15. Entire Agreement /Amendments to the Contract

The provisions of this Contract, together with the Agreements and exhibits incorporated by reference, shall constitute the entire Municipal Waste Processing and Disposal Capacity Contract between the County and the Contractor, superseding all prior processing and disposal capacity agreements or contracts, if any, except as otherwise provided in this Contract. No amendment or modifications of the terms and conditions of the Contract shall be made prior to the date the Contract is duly executed by the Erie County Executive. Once the Contract is duly executed by the Erie County Executive, no amendment or modifications of the terms and conditions of the Contract shall be effective unless such amendment or modification is in writing and signed by authorized representatives of all parties entitled to receive a right or obligated or perform a duty under the Contract. A signed original amendment to the Contract shall be furnished to all parties to be attached to the original Contract. The County and the Contractor agree that any existing Municipal Waste processing and disposal contracts between them are hereby rendered null and void and superseded by this Contract. Any existing Host County Fee Agreements between the parties shall remain in full force and effect notwithstanding any provisions of this Contract.

16. Merger Clause

The Contract shall constitute the final and complete agreement and understanding between the parties. All prior and contemporaneous agreements and understandings, whether oral or written, including, without limitation, the Request For Proposals (RFP) submitted by Contractor, shall be without effect on the construction of any provisions or terms of the final contract if they alter, vary or contradict the Contract.

17. Notices

All notices, demands, requests and other communications under this contract shall be deemed sufficient and properly given if in writing and delivered in person, or by recognized carrier service to the following addresses, or sent by certified or registered mail, postage prepaid, with return receipt requested, at such addresses. Provided, if such notices, demands, requests or other communications are sent by mail, they shall be deemed as given on the third day following such mailing, which is not a Saturday, Sunday or day on which United States mail is not delivered:

County: *The Erie County Department of Planning,*

Erie County Courthouse, Room 111

140 West Sixth Street | Erie, PA 16501

Attention: Mr. Don Blakesley, Recycling Coordinator

Contractor Notice Address as shown on Form B.

Either party may, by like notice, designate any further or different addresses to which subsequent notices shall be sent. Any notice under this Contract signed on behalf of the notifying party by a duly authorized attorney at law shall be valid and effective to the same extent as if signed on behalf of such party by duly authorized officer or employee.

III. SERVICE, OPERATIONS, AND PERFORMANCE

1. Services of the Contractor

The Contractor agrees to accept, process and dispose specified quantities and types of Municipal Waste originating from sources located in Erie County, in accordance with all applicable Federal, state and local regulations. Nothing herein shall prohibit any Contractor from entering into any separate contract with another person or municipality to provide such waste collection and/or transportation services.

2. Types and Quantities of Municipal Waste

The specific types and quantities of Municipal Waste that will be accepted at the Contractor's Facility under this contract shall be those as listed in Form B:

Annual adjustments to the maximum Municipal Waste quantities may be permitted if the request for adjustments is made in writing at least sixty (60) days in advance of the anniversary of the

effective date of the Contract . Any quantity adjustment request will be mailed to the County by United States Postal Service, Certified Mail. If an authorization is approved, it will be considered an amendment to this Contract and the adjusted quantities will supersede those previously in effect.

3. Maximum Tipping Fees or Rate Schedule

The maximum rate or tipping fee to accept the various types of Municipal Waste shall be as listed on Form A.

4. Delivery of Wastes

The Municipal Waste to be accepted at the Contractor's Facility under this Contract will be delivered to the Contractor's Facility by municipal and/or private waste haulers. The waste haulers responsible for delivering the Municipal Waste that will be accepted under the contract will be those required to be authorized by the Pennsylvania Waste Transportation Safety Act 90 as well as those regularly engaged in the business of waste transportation but are exempt. Only Municipal Waste materials delivered to the Contractor's Facility by authorized and such exempt waste haulers shall count towards any maximum waste quantity limits under the Contract. Contractor shall be responsible for obtaining a current list of the authorized waste haulers from the appropriate State agency.

5. Minimum Hours of Operation

Unless mutually agreed upon otherwise by the Contractor and the County, the Contractor will accept delivery of Municipal Waste from waste haulers authorized by the Pennsylvania Waste Transportation Safety Act 90 during the hours shown on Form B, excluding generally recognized business holidays, including without limitation (President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas and New year's Day). In the event of any lengthy travel time from sources in the County to an out-of-county processing and disposal facility, the Contractor will be required to exhibit flexibility in the operating hours for accepting wastes from Erie County. The Contractor shall have complete discretion to make additional arrangements for accepting waste at any earlier or later hours and/or on Sundays.

6. Complaints

The Contractor shall receive and respond to all complaints from waste transporters authorized by the Pennsylvania Waste Transportation Safety Act 90 as well as those regularly engaged in the business of waste collection and transportation in Erie County regarding the acceptance of waste materials at his Facility. Any complaints received by the County will be directed to the Contractor. In the event the Contractor cannot satisfactorily resolve a complaint within five (5) days after receipt of the complaint, the County shall have the right to demand a written explanation or satisfactory resolution of the complaint pursuant to the breach of contract provisions herein.

7. Municipal Recycling Programs

The County and individual municipalities in Erie County shall have the right to establish and operate any municipal recycling programs, including drop-off recycling centers and curbside collection programs, to source separate and remove recyclable materials from the Municipal Waste stream prior to the delivery of the waste to the Contractor's facility. The Contractor shall

notify the County in the event Contractor becomes aware that materials that are being collected in the County and/or municipal recycling programs are being routinely delivered to Contractor for waste processing and disposal. The Contractor shall cooperate with the County in reaching the Commonwealth of Pennsylvania's Recycling goals.

8. Title to Solid Waste

Except in the case where any unacceptable waste or Hazardous Waste is delivered to the Contractor's Facility, the title to the Municipal Waste and any benefits of marketing any materials or energy recovered from the Municipal Waste shall pass to the Contractor upon delivery of the waste to the Contractor's Facility and acceptance of the waste by the Contractor.

9. Unacceptable or Hazardous Waste

The Contractor shall have the right and discretion to inspect and reject any such Hazardous and/or Unacceptable waste delivered to the Facility by the haulers servicing the county. The waste haulers authorized by the Pennsylvania Waste Transportation Safety Act 90, as well as those regularly engaged in the business of waste transportation but are exempt from Act 90, shall be responsible for the prompt removal and processing and disposal of any such unacceptable waste and shall bear all costs associated with the subsequent removal, transportation and processing and disposal of such Hazardous and/or Unacceptable waste.

10. Basis and Method of Payment

A. The County shall not be responsible for the direct payment of any tipping fees to the Contractor under the Contract. All tipping fees shall be paid directly by the municipal and/or private waste haulers, which deliver the waste to the Contractor's Facility.

B. The Contractor shall be responsible for the billing and collection of all tipping fees from the waste haulers. The method of billing and collection arrangements between the waste haulers and the Contractor shall comply with all applicable Federal and State laws governing such commerce and business activities.

C. The County shall not be responsible for failure of any waste hauler, authorized or otherwise, to pay the Contractor's tipping fees and no such fees will be paid by the County. In the event County is notified of repeated delinquency or non-payment by any waste hauler of Contractor's tipping fees, County may enforce any remedies, which may be available to the County.

D. The Contractor shall not charge a tipping fee to any waste hauler authorized by the Pennsylvania Waste Transportation Safety Act 90, as well as those regularly engaged in the business of waste transportation but are exempt from Act 90, that is greater than the maximum rates established by this Contract for each type of waste originating in Erie County. Nothing in this Contract shall be construed to prevent or preclude the Contractor from negotiating alternate tipping fees with any waste hauler provided such fees do not exceed the maximum rates under this Contract.

11. Rate Escalation and Adjustments

A. If Contractor desires to adjust the maximum rate or tipping fee for processing and disposal of each type of Municipal Waste under the Contract in excess of the amount provided in Form A in the RFP submitted by Contractor to the County, the Contractor may request the consent of the County for such increase by providing the County with at least 60 days advance written notice of

the proposed increase. Consent to any proposed increase shall be at the sole discretion of the County. The notice of proposed increase to the County shall be delivered to the County by United States Postal Service, Certified Mail on or before October 1 of the year prior to the proposed effective date of the increase.

B. Unless the County and Contractor mutually agree to an alternate date, all annual rate adjustments shall become effective on January 1st of each year of the Contract to be consistent with the starting dates and new contract periods of most Municipal Waste collection contracts.

C. The Contractor may also request consent of the County at any time for additional rate or fee adjustments on the basis of unforeseen changes in operating costs resulting from any new or revised federal, state or local laws, ordinances, regulations or permit requirements, which were not in effect at the time when the original Contract was awarded. The Contractor shall have the burden of preparing and submitting any necessary information to support and document any such rate adjustments. The County shall have the right to inspect, by itself or by an independent auditor, any pertinent financial records that document the need for a rate adjustment using audit standards similar to the Federal procurement regulations. The County shall also have the right to modify the amount of a rate increase requested, modify the effective date of a rate adjustment or to reject a rate increase petition for lack of justification.

D. In the event that any one rate adjustment petition for unforeseen changes in the operating costs of the processing or disposal facility, as set forth in paragraph C above, or the cumulative impact of several such rate adjustment petitions, results in a rate increase greater than 25 percent of the base tipping fee under this contract, the County at its discretion shall have the right to solicit new Municipal Waste, processing and disposal service proposals and the right to terminate this Contract, if in the judgment of the County, more favorable processing and disposal contracts can be secured from other facilities.

E. All annual rate adjustments shall be calculated on only the actual operating cost for the Contractor's processing and disposal facility. All annual rate adjustments as set forth in , demonstrated and included with Form A represent the total tipping fee including any and all fees, taxes, and surcharges as described. Any fixed pass-through or add-on surcharges or costs, such as the surcharge for the recycling fund, post-closure trust fund and County or host municipality benefit fee imposed on Pennsylvania Facilities by Act 101 or any other surcharge or pass-through cost imposed by any host county or municipality, will be deducted from the maximum rate or tipping fee prior to calculating any annual rate adjustment.

12. RESERVED County Administration/Recycling Surcharge

In the event that legislation should be enacted during the period of this contract authorizing the County to assess fees or surcharges for the administration and implementation of its solid waste and recycling programs the County reserves all such rights and privileges to negotiate and collect such fees from the Contractor.

IV. RECORD KEEPING AND REPORTING REGULATED WASTE

1. The Contractor will be required to install and maintain a scale to weigh all incoming waste to the contractor's Municipal Waste processing or disposal facility or, in the case of a transfer station, to weigh all Municipal Waste delivered to the County designated processing or disposal facility by the transfer station. The scale used to weigh Municipal Waste shall conform to the Weights and Measurement Act of 1965 (73 P.S. sections 1651- 1692) and applicable regulations

thereunder; the operator of the scale shall be a licensed public weighmaster under the Public Weighmasters Act (13 P.S. sections 1771-1796) and any regulations.

2. Daily Operational Records

The Contractor shall make and maintain an operational log for each day that Municipal Waste is received, processed or disposed. At a minimum, the following information shall be recorded in the daily operational log:

- A. The total weight of each type of Municipal Waste received at the Facility from all sources;
 - B. The County from which the Solid Waste originated, or if the waste originated from outside the state, the state from which the waste originated; and
 - C. The name of each waste hauler or transporter delivering Municipal Waste to the Facility.
1. Loads from transfer facilities should be made distinguishable from those directly hauled.

3. Quarterly Operation Reports

The Contractor shall prepare and submit on forms approved by the County a quarterly operation report. The quarterly operation reports shall be submitted to the County on or before the 20th day of April, July, October and January of each year for the preceding three (3) month calendar period ending on the last day of March, June, September and December, respectively. At a minimum, the following information shall be included in each quarterly operation report:

- A. The total weight of each type of Municipal Waste received from all sources within the County during each month of the quarterly reporting period;
- B. The names of the waste haulers or transporters and self-haulers that delivered waste originating from sources in Erie County.
- c. A summary of the total weight of each type of Municipal Waste received each month from each waste hauler or transporter and self-hauler delivering waste originating from sources in Erie County;
- D. A summary of the total weight of each type of Municipal Waste received each month from all waste haulers and self-haulers delivering waste originating from sources in Erie County. Loads from transfer facilities should be made distinguishable from those directly hauled; and
- E. A Contractor that operates, or whose parent company operates, a transfer station that receives Erie County municipal waste for transport to one of the designated facilities shall also submit a report from the transfer station showing:
 1. The names of the waste haulers or transporters and self-haulers that delivered Municipal Waste originating from sources in Erie County.
 2. A summary of the total weight of each type of Municipal Waste received each month from each waste hauler or transporter and self-hauler delivering waste originating from sources in Erie County.
 3. The total amount of tons of Erie County Municipal Waste transported from the transfer station to each disposal facility designated in the Plan to receive waste from Erie County.

The inbound and outbound tons of Erie County waste must reconcile.

4. Annual Operation Report

The Contractor shall prepare and submit on forms approved by the County an annual operation report for each calendar year or other fiscal year approved by the County. The annual operation report shall be submitted to the County on or before June 30th of each year unless an alternate submission date is approved by the County. At a minimum, the following information shall be included in the annual operational report:

- A. For Municipal Waste landfills, a description of the capacity or volume used during the past year and the remaining permitted capacity based upon the annual topographic survey information;
- B. A current Certificate of Insurance as evidence of continuing insurance coverage for public liability insurance as required under the Contract;
- C. For resource recovery or other Municipal Waste processing facilities, the name and the location of the landfill disposal facilities where any bypassed wastes, unprocessable waste and waste by-products, such as incinerator ash, were ultimately disposed;
- D. Copies of all notices of violation, civil penalty assessments and/or administrative orders issued by federal, state or county regulatory authorities to the owner and/or operator of the Facility during the year; and
- E. If available to the Contractor, Certificate of good standing- from its bonding company.
- F. The annual operating reports that must be prepared and submitted to the DEP by Pennsylvania processing and disposal facilities (or equivalent regulatory agency in the state in which the facility is located) may constitute acceptable information for portions of the annual operating report for the purposes of the Contract, provided they are accompanied by completed and accurate forms approved by the County along with any required supporting information.

5. Administrative Inspections

Upon reasonable notice, and during regular business hours, the County and its authorized representatives shall have access to Contractors' logs and records pertaining to the quantities and sources of Municipal Waste for the purpose of verifying compliance with the terms and conditions of this Contract.

6. Special Reporting Requirements

The Contractor shall provide written notification to the County of any permit modification applications for the following types of permit changes, on the same date the application is first submitted to the Pennsylvania DEP (or equivalent regulatory agency in the state in which the facility is located):

- A. Changes in the permitted site volume or capacity,
- B. Changes in the permitted average and/or maximum daily waste volume or loading rates,
- C. Changes in the excavation contours or final contours, including the final elevations and slopes,

D. Changes in the permitted acreage, and

E. Changes in ownership.

V. PUBLIC LIABILITY INSURANCE REQUIREMENTS

1. Insurance Requirement

The Contractor shall be required to maintain in full force and effect throughout the term of the Contract, and any renewal or extension thereof a general liability insurance policy to provide continuous coverage against third party claims for property damage and personal injury, as specified in Chapter 271 of the DEP's Municipal Waste Management Regulations (Pennsylvania Bulletin, Vol. 18, No. 15, April 9, 1988) and the following section. The effective date of the required insurance policy shall be prior to the initiation of any waste processing and disposal services under this Contract. Contractor shall cause County to be added as an additional insured on all policies of insurance required under the terms of this Contract.

2. Proof of Insurance Coverage

The Contractor shall be required to submit to the County proof of insurance coverage upon execution of the Contract. At a minimum, the proof of insurance shall consist of a certificate of insurance which:

A. States the name of the insurance company, the insured owner and facility covered by the policy.

B. Identifies the kinds of coverage provided by the policy and the amounts of coverage, exclusive of legal costs.

C. Identifies the beginning and ending dates for the policy.

D. Specifies that a minimum 60-day period written notice shall be given by the insurer to the County and the Owner, by certified mail, before any cancellation or other termination of the policy becomes effective.

E. States that the insurer is liable for payment on the policy without regard for the bankruptcy or insolvency of the insured.

F. Be signed by an authorized agent of the insurance company.

3. Maintenance of Insurance Coverage

The Contractor shall be required to submit to the County a current certificate of insurance as evidence of continuous insurance coverage as part of the annual operation report required under the Contract. The annual certificate of insurance shall contain the same information and provisions as specified in the original proof of insurance certificate under the requirements of the preceding paragraph. Failure to submit the required proof of insurance or to maintain the required minimum insurance coverages would be considered a default by the Contractor in accordance with the provisions of the Contract.

VI. NONDISCRIMINATION

Neither the Contractor nor any subcontractor nor any person(s) acting on his behalf shall discriminate against any person because of race, sex, age, creed, color, religion, national origin or any other protected category.

VII. INDEMNIFICATION

The Contractor or its successors and assigns shall indemnify and save harmless the County, their officers, agents, servants and employees from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs, expenses and attorney fees resulting from any willful or negligent act or omission of the Contractor or its successors or assigns, its officers, agents, servants and employees in the performance of this Contract; provided however, that the Contractor or its successors and assigns shall not be liable for any suits, actions, legal proceedings, claims, demands, damages, costs, expenses and other attorney fees arising out of the award of this Contract or the willful or negligent act or omission of the County, their officers, agents, servants and employees.

VIII. PERMITS

The Contractor shall be responsible for obtaining any and all permits necessary for the construction and operation of the Municipal Waste processing and disposal facilities required to comply with the terms and conditions of the Contract, and any and all costs or expenses of obtaining such permits. Failure to obtain and maintain permits shall constitute a breach of this Contract.

IX. Right-to-Know Law

The Pennsylvania Right-to-Know Law, 65 P.S. § 67.101-3104, applies to this Contract.

Unless the Contractor provides the County in writing, with the name and contact information of another person, the County shall notify the Contractor's Project Coordinator using the Contractor information provided by the Contractor in the legal contact information provided in this Contract, if the County needs the Contractor's assistance in any matter arising out of the Right-to-Know LAW ("RTKL"). The Contractor shall notify the County in writing of any change in the name or the contact information within a reasonable time prior to the change.

Upon notification from the County that the County requires the Contractor's assistance in responding to a RTKL request for records in the Contractor's possession, the Contractor shall provide the County within 14 calendar days after receipt of such notification, access to, and copies of, any document or information in the Contractor's possession which arises out of the Contract that the County requests ("Requested Information") and provide such other assistance as the County may request in order to comply with the RTKL. If the Contractor fails to provide the Requested Information within 14 calendar days after receipt of such request, the Contractor shall indemnify and hold the County harmless for any damages, penalties, detriment or harm that the County may incur under the RTKL as a result of the Contractor's failure, including any statutory damages assessed against the County.

The County's determination as to whether the Requested Information is a public record is dispositive of the question as between the parties. The Contractor agrees not to challenge the County's decision to deem the Requested Information as Public Record. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, the Contractor will immediately

notify the County, and will provide a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL within seven (7) calendar days of receiving the request. If, upon review of the Contractor's written statement, the County still decides to provide the Requested Information, the Contractor will not challenge or in any way hold the County liable for such a decision.

The County will reimburse the Contractor for any costs associated with complying with this provision only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

The Contractor agrees to abide by any decision to release a record to the public made by the Office of Open Records, or by the Pennsylvania Courts. The Contractor agrees to waive all rights or remedies that may be available to it as a result of the County's disclosure of Requested Information pursuant to the RTKL. The Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this Contract and shall continue as long as the Contractor has Requested Information in its possession.

WITNESS the execution hereof, the parties expressly intending to be legally bound pursuant to the Uniform Written Obligations Act, 33 Pa. C.S. § 6, Contractor and County have caused this contract to be executed by their respective duly authorized agents, as of the date and year first written.

COUNTY OF ERIE

DATE _____

County Executive

(SEAL)

ATTEST: _____

Director of Administration

CONTRACTOR

CONTRACTOR: _____

WITNESS;

TITLE: _____

Form A – Cost of Processing and Disposal

Name of Facility _____						
Maximum Tipping Fees Per Ton For Each Category of Waste						
The maximum tipping fee shall not exceed the posted gate rate.						
Include all applicable surcharges, fees, taxes from Legislation, Regulation, or Programs of State, Federal, County or Host Municipalities						
Show a breakdown of those fees in the following table						
Indicate any annual escalators that will apply or attach a separate table demonstrating future rates.						
	MSW	Construction Demolition	Sewage Sludge	Approved Regulated Medical Waste	Other	Other
Base Tipping Fee(without taxes, and other fees)						
List Name of Fee, Tax, Surcharge below.	List Amount for Each Fees, Taxes, Surcharges that will apply to Erie County MSW					
Total Tipping Fee including all fees and surcharges						

Form B -Reserved Capacity

FACILITY: _____

Types and Quantities of Municipal Solid Waste**Specify tons per day and tons per year**

Year	MSW Only	C&D	Sludge	Other	Other	Total
2014-2015						
Tons Per Day						
Tons Per Year						
2015-2016						
Tons Per Day						
Tons Per Year						
2016-2017						
Tons Per Day						
Tons Per Year						
2017-2018						
Tons Per Day						
Tons Per Year						
2018-2019						
Tons Per Day						
Tons Per Year						
2019-2020						
Tons Per Day						
Tons Per Year						

2020-2021						
Tons Per Day						
Tons Per Year						
2021-2022						
Tons Per Day						
Tons Per Year						
2022-2023						
Tons Per Day						
Tons Per Year						

Form B - Part II Reserved Capacity

Total Combined Quantities of all Accepted Categories of Municipal Waste

YEAR	TOTAL ERIE MSW TONS PER YEAR (all categories)	PERCENTAGE Reserving Capacity for % of Erie MSW Annually (all categories)	ANNUAL TONS Reserving Capacity for #Tons Erie MSW Annually (all categories)	OPERATING DAYS Estimated Annual Working Days	TONS PER DAY Reserving Capacity for #Tons Erie MSW Daily (all categories)
2014	195,355.4				
2015	195,489.3				
2016	195,623.3				
2017	195,757.2				
2018	195,891.1				
2019	196,025.1				
2020	196,159.0				
2021	196,368.0				
2022	196,577.1				
2023	196,786.1				

Operating hours from _____ to _____ Monday through Friday and
from _____ to _____ on Saturdays,

Indicate tons of Erie County Municipal Waste donated by Contractor per year for non-profit
activities including but not limited to road adoptions and open dump clean-ups:

_____ tons

Notices

All notices, demands, requests, and other communications under this contract shall be delivered to:

Contractor: _____

Address: _____

Attention: _____

With a copy to: _____ Attention:

Section 5

Required Forms

The following forms shall be completed, signed by an official authorized to bind the Offeror, and attached to the proposal.

1. Form C- Representations and Certifications
2. Form D- Contractor Information

Form C- Representations and Certifications

Company _____

Facility _____

Authorized Official _____

An officer of the organization submitting the proposal empowered and authorized to sign such documents makes the following representations and certifications as part of this proposal:

1. Certification of Non Collusion and Independent Price Determination

I certify that as an officer of _____, I have lawful authority and have thus been empowered to submit and execute the proposal contained herein; that neither have I nor any representative of _____ has either directly or indirectly entered into any agreement, express or implied with any representative or representatives of other companies or individuals submitting such proposals for the object of controlling of price, the limiting of proposals submitted, the parceling out of any part of the resulting contract or subject matter of the proposal or proposals or any profits thereof; and that I nor any representatives of _____ have not nor will not divulge the sealed proposal to any person or persons except those having a partnership or other financial interest with him or her in the proposal or proposals until after the said sealed proposal or proposals are opened.

I further certify that neither I nor any representative of _____, have been a party to collusion among proposers in restraint of the freedom of competition by agreement to make a proposal at a fixed price or to refrain from submitting a proposal or with any state official or employee as to quantity, quality, or price in any discussions between proposers and any County official concerning exchange of money or other things of value for special consideration in the letting of the contract and that neither I nor any representative of _____ have paid, given, donated or agreed to pay give or donate to any official, officer, or employee of Erie County any money or other thing of value either directly or indirectly.

2. Acceptance Period

I agree to allow 180 days from the date of this proposal for acceptance thereof by the Commissioners of Erie County.

3. Ambiguity

I recognize and accept that in the case of any ambiguity or lack of clarity in stating fees, prices or other information and conditions in the proposal, the County shall have the right to construe such prices or information and conditions in a manner most advantageous to the County or to reject the proposal.

4. Contingent Fee Representation

I certify that _____ has not employed or retained any company or person other than a full time bona fide employee working solely for _____ to solicit or secure this contract nor has it paid or agreed to pay any company or person other than a full time bona fide employee working solely for _____ any fee commission, percentage or brokerage fee contingent upon or resulting from the award of this contract. I agree to furnish any information relating to both conditions as requested by Erie County.

5. Equal Employment Opportunity

I assure that neither the employees, applicants for employment, nor those of any labor organization, subcontractor or employment agency in either referring or furnishing employee applicants are discriminated against by _ _____.

Executed under penalty of perjury this _____ day of 2014, at _____

By_ _____ (name)

_____ (title)

SEAL _____ (company)

Date:_____

On _____, 2013, before me, the undersigned, a Notary Public in and for _____, personally appeared _____, known to me to be the _____ of Company that executed the within instrument on behalf of the Proposer therein named, and acknowledged to me that such Proposer executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal in the County of _____, this _____ day of _____ 2014.

Notary _____

My Commission expires _____ Notary Public

Form D- Contractor Information

Company_____

Address _____

Phone _____ Fax _____

Owner/President_____

Type of organization (corporation, joint venture, partnership, individual)

For joint ventures, indicate role and ownership share of each participant. Providing information for each. List any and all subcontractors.

Proposed Processing and Disposal Facility _____

Permit #/ State /Date Issued/Expiration _____

Physical Location

(County/Municipalities)_____

Have you or any officer of the company or facility ever failed to complete any contract awarded in your own name or that of the company or facility?

If yes, explain who, where and why_____

Have you or any officer of the company or facility ever failed to complete any contract awarded in your own name or that of any other company or facility?

If yes, explain who, where and why_____

Are you or any officer of the company or facility engaged in any contracts for services similar to those contained in the proposal herein?

If yes, explain who, where and when _____

Have you or any officer of the company or facility your partners or joint ventures been party to a lawsuit issued within the past three years that might impact your ability to perform the obligations of this contract?

If yes, explain who, where and why _____

Have you submitted a complete and accurate compliance history outlining any and all judicial actions, convictions, consent orders or agreements, violations, and resolutions for any environmental, or public health and safety laws and regulations?

Explain or comment on any desired actions _____

Executed under penalty of perjury this _____ *day of 2014 at* _____

By _____ (name)

_____ (title)

SEAL _____ (company)

Date: _____

On _____, 2014, before me, the undersigned, a Notary Public in and for _____, personally appeared _____, known to me to be the _____ of Company that executed the within instrument on behalf of the Proposer therein named, and acknowledged to me that such Proposer executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal in the County of _____, this _____ day of _____ 2014 _____

My Commission expires _____ Notary Public

APPENDIX B

Process to Add a Disposal Facility

Erie County Municipal Solid Waste Management Plan

Petition for Designation as Processing/Disposal Facility

Erie County has secured Disposal Capacity Agreements for a sufficient amount of disposal capacity for all municipal waste generated within the County. However, the County recognizes that new disposal and processing opportunities may present themselves from time to time. Therefore, Erie County has established guidelines to include added facilities during the ten-year period of its current Municipal Solid Waste Management Plan. Municipalities, haulers, and/or transfer stations must use this form to notify the County of a party's interest in using another facility. Information provided in this form will be used by the County to contact a facility representative and send the requirements necessary to qualify the facility as a participant in the Plan. The facility must meet all of the same criteria required in the original Request for Proposals for Disposal Capacity, including execution of the Contract as presented. Any and all costs associated with the Plan revision to add a facility shall be the responsibility of either the Petitioner or the Facility as indicated and authorized by a signature on this form.

Please complete and submit the form to:

Erie County Department of Planning

Erie County Courthouse, Room 111

140 West 6th Street

Erie, PA 16501

Petitioner

Name: _____

Organization: _____

Address: _____

_____ Phone Number: _____

Fax Number: _____

E-Mail Address: _____

Facility

Name of Facility: _____

Contact Person: _____

Address: _____

_____ Phone Number: _____

Fax Number: _____

E-Mail Address: _____

Explain the need to have this facility included in the Plan: (Attach Additional Sheets if Necessary)

Party responsible for total costs of Plan Revision to add facility:

Name _____ Title _____

Signature _____ Date _____

Procedures and Instructions to Petitioner

A disposal/processing facility, a hauler, a municipality or a business must complete and submit the petition form to the Erie County Department of Planning.

Within 15 working days of the receipt of a petition, the Erie County Department of Planning will send to the petitioner or the facility, a request for proposal for disposal capacity outlining the same requirements and format for submission as the original document utilized in the selection of those facilities currently designated in the Plan.

Upon receipt of the completed proposal from the petitioning facility, the Erie County Department of Planning will notify the Pennsylvania Department of Environmental Protection of its intentions to add a facility.

The Erie County Department of Planning will review and respond to the information in the proposal within 45 working days.

If information in the submitted proposal is complete, accurate and meets the accepted criteria, the Erie County Department of Planning will notify by letter all municipalities within the County of the intent to add a facility to the Plan. The County will accept comments for a period of thirty days.

After the thirty day comment period, the Erie County Department of Planning will formally submit the addition of the facility to the Pennsylvania Department of Environmental Protection for approval.

Upon approval by the Pennsylvania Department of Environmental Protection, the Erie County Department of Planning will notify by letter all County municipalities that a facility has been added to the Plan.

At that time the requesting facility, hauler, municipality, or business will also be notified that the facility is formally designated in the Plan for disposal of Erie County generated municipal waste.

APPENDIX C

Ordinances

Ordinance Number , 2015

Amending the Erie County Municipal Waste Flow Control and Transporter Licensing Ordinance

WHEREAS, the County of Erie (the "County"), in accordance with the County's 1995 Municipal Solid Waste Management Plan, enacted Ordinance No 96, 1995 on January 1, 1997, which amended Ordinance No. 57, 1992 enacted on May 6, 1992 known as the "Erie County Municipal Waste Flow Control and Transporter Licensing Ordinance"; and

WHEREAS, the County has now adopted a revised 2015 Erie County Municipal Solid Waste Management Plan ("2015 Plan") in accordance with the requirements of Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act of 1998 ("Act 101"); and

WHEREAS, certain revisions to the above-referenced Ordinance No. 96, 1995 are necessary and appropriate to conform to the County's revised 2015 Plan; and

WHEREAS, Act 101 gave the County the primary responsibility for planning for municipal waste management within its boundaries; and

WHEREAS, it is the position of the Pennsylvania Department of Environmental Protection ("PADEP") that counties may implement a waste flow control mechanism ensuring that the municipal waste generated within the county is disposed at the disposal sites designated in the county plan; and

WHEREAS, the County has the power and duty to adopt any such ordinances deemed necessary to implement its Municipal Waste Management Plan and its revisions by the authority vested to the County pursuant Act 101; and

NOW, THEREFORE, BE IT ENACTED, the County Council of the County of Erie hereby enacts this Municipal Waste Flow Control and Reporting Ordinance as follows:

Section 1 - Short title

This Ordinance shall be known and referred to as the *"Erie County Municipal Waste Flow Control and Reporting Ordinance."*

Section 2 - Definitions

The following words and phrases as used in this Ordinance shall have the following meanings:

Act 97 - The Pennsylvania Solid Waste Management Act of 1980 (P.L. 380, No. 97, July 7, 1980) as now or hereafter amended.

Act 101 - The Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act (SB528, Act 1988-101, July 1988) as now or hereafter amended.

C&D Waste or Construction/Demolition Waste - Solid waste resulting from the construction or demolition of buildings and other structures, including, but not limited to, wood, plaster, metals, asphaltic substances, bricks, block, and unsegregated concrete. The term also includes dredging waste. The term does not include the following if they are separate from other waste and are used as clean fill: (i) uncontaminated soil, rock, stone, gravel, unused brick and block

and concrete; (ii) waste from land clearing, grubbing and excavation, including trees, brush, stumps, and vegetative material.

Captive C&D Waste Facility - Any waste C&D disposal facility or construction/demolition waste landfill (as defined in Act 97, Act 101 and/or the DEP regulations thereunder) utilized solely by the owner/operator/permittee thereof for its own private captive use for its own C&D waste only, and which is not used by, open to and/or available to other waste haulers or entities or the public generally for the disposal of C&D waste.

Commercial Establishment - Any establishment engaged in non-manufacturing or non-processing business, including, but not limited to, stores, markets, office buildings, restaurants, shopping centers and theaters.

County or Erie County - The County of Erie, Pennsylvania or any agency, department or authority designated as the County's representative for the purposes of this Ordinance.

DEP - The Pennsylvania Department of Environmental Protection.

Designated Facility - Any solid waste storage, collection, transfer, processing, or disposal facility or site listed in the Erie County Municipal Solid Waste Management Plan.

Hazardous Waste - Any solid waste or combination of solid wastes, as defined in Act 97, which because of its quantity, concentration or physical, chemical or infectious characteristics may: (1) cause or significantly contribute to an increase in mortality or an increase in morbidity in either an individual or the total population; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Industrial Establishment - Any establishment engaged in manufacturing or processing, including, but not limited to, factories, foundries, mills, processing plants, refineries, mines and slaughterhouses.

Institutional Establishment - Any establishment engaged in service, including, but not limited to, hospitals, nursing homes, orphanages, schools and universities.

Leaf Waste - Leaves, garden residues, shrubbery and tree trimmings, and similar material, but not including grass clippings.

Municipality - Any borough, township, or city within the County.

Municipal Waste - Any garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities, and sludge not meeting the definition of "residual" or "hazardous waste" in Act 97 from a municipal, commercial or institutional water supply treatment plant, wastewater treatment plant or air pollution control facility. The term does not include source separated recyclable materials or material approved by DEP for beneficial use.

Municipal Waste Landfill - Any facility that is designated, operated or maintained for the disposal of municipal waste, whether or not such facility possesses a permit from the DEP under Act 97.

Person - Any individual, partnership, corporation, association, institution, cooperative enterprise, municipal authority, Federal Government or agency, State institution and agency, or any other legal entity which is recognized by law as the subject or rights and duties. In any provisions of this Ordinance which prescribe a fine, imprisonment or penalty, or any combination of the foregoing, the term **person** shall include the officers and directors of any corporation or other legal entity having officers and directors.

Plan or MSW Plan – The Erie County Municipal Solid Waste Management Plan approved pursuant to the Act.

Processing – Any method or technology used for the purpose of reducing the volume or bulk of municipal or residual waste or any technology used to convert part or all of such waste materials for off-site reuse. Processing facilities include, but are not limited to: transfer facilities, composting facilities, and resource recovery facilities. This term does not include a collection or processing center that is solely utilized for source separated recyclable materials.

Recycling - The collection, separation, recovery, and sale or reuse of metals, glass, paper, leaf waste, plastics, and/or other materials which would otherwise be disposed or processed as municipal waste or the mechanized separation and treatment of municipal waste (other than through combustion) and creation and recovery or reusable materials other than a fuel for the creation of energy.

Recycling Program – The Erie County Recycling Program run by the Erie County Sustainability Coordinator.

Regulated Waste – Municipal Waste generated within the County and regulated by the County pursuant to this Ordinance and the County Rules and Regulations.

Residual Waste - Any garbage, refuse, other discarded materials or other waste, including solid, liquid, semi-solid or contained gaseous material resulting from industrial, mining and agricultural operations; and sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous.

Scavenge/Scavenging - The unauthorized and uncontrolled removal of material or recyclables placed for collection or from a solid waste processing or disposal facility.

Solid Waste - Any waste, including, but not limited to, municipal, residual or hazardous wastes, including solid, liquid, semisolid or contained gaseous material.

Source Separated Recyclable Materials - Materials generated or collected within the County that (i) are separated from municipal waste at the point of origin by the generator in accordance with the Plan and (ii) are recycled. The term does not include material separated from source separated recyclable materials.

Transportation - The off-site removal of any municipal waste and/or source-separated recyclable material at any time after generation.

Transporter - Any person engage in the transportation of municipal waste and/or source-separated recyclable materials generated within the boundaries of Erie County. A transporter shall not include:

- a) an individual who transports only municipal waste and/or source-separated recyclable materials generated by his or her own personal single family household activities, provided that such individual is not engaged in the transportation business; or
- b) any farmer carrying out the normal activities of his or her farming operation, including composting and spreading of manure or other farm related agriculture waste; or
- c) any transporter involved exclusively in the transportation of septage, sewage sludges, infectious/chemotherapeutic waste, or other special handling municipal wastes as so determined by DEP; or
- d) any transporter transporting exclusively residual and/or hazardous waste; or
- e) any non-profit organization or municipality transporting exclusively source-separated recyclable materials.

Transfer Station - Any supplemental transportation facility used as an adjunct to waste collection route vehicles.

Section 3 - Flow Control; Recycling

A. Flow Control: Any persons hauling, collecting and/or transporting municipal waste collected or generated within the County shall deliver and/or dispose of such municipal waste either:

- (1) At such a processing and/or disposal facilities as are listed as County Designated Facilities for such municipal waste in the County's Plan; or
- (2) At any fully permitted transfer stations and/or processing facilities for such municipal waste, provided, however, that the ultimate disposal by such transfer stations and/or processing facilities (subsequent to any processing) of such waste must occur at the designated facilities for such waste as set forth in the Plan.

No Person shall transport or deliver, or cause to be transported or delivered, municipal waste to a facility other than a County Designated Facility unless such transport or delivery is expressly provided for in the Plan. The County of Erie hereby designates the following permitted municipal waste landfill facilities to receive all municipal waste generated in the County:

- Chestnut Valley Landfill, German Township, Fayette County, PA
- Greentree Landfill, Fox Township, Elk County, PA
- Hyland Landfill, Angelica, Allegany County, NY
- Lakeview Landfill, Summit Township, Erie County, PA
- McKean Landfill, Sergeant Township, McKean County, PA

- Northwest Sanitary Landfill, Clay Township, Butler County, PA
- Seneca Landfill, Jackson Township/Lancaster Township, Butler County, PA

B. Pre - Existing Contracts : Nothing in this Ordinance shall be construed to interfere with, or in any way modify, the provisions of any contract for municipal waste disposal, processing or collection in force in the County as of the effective date of this Ordinance. However, no renewal of such existing contract upon the expiration or termination of the original term thereof and no new contract for municipal waste disposal, processing or collection shall be entered into after the effective date of this Ordinance if such renewal or such new contract fails to conform to the requirements of this Ordinance.

C. Recycling Facilities: Nothing in this Ordinance shall be deemed to limit or prohibit recycling or the operation of any recycling facility. Transporters of recyclables shall be exempted from use of the designated disposal facilities but must provide proof that the recyclables are taken to a material recovery processing facility or marketed for end use as part of quarterly reporting requirements.

Section 4 - Prohibited Activities

A. It shall be unlawful for any person to haul, collect, transport, process, and /or dispose of any municipal waste generated within Erie County in a manner that is not in accordance with the provision so this ordinance, the Plan, Act 97, Act 101, DEP regulations, and all other applicable laws and regulations.

B. It shall be unlawful for any person to transport to or dispose of any municipal waste generated within Erie County to any processing or disposal facility, except the designated facilities set forth in the County Plan or any fully-permitted transfer stations and/or processing facilities for such waste which are permitted by the terms of the Plan, this Ordinance, or any amendments thereto.

C. It shall be unlawful for any person to dispose or permit the disposal, in or on any property within Erie County or elsewhere, of municipal waste generated within Erie County or elsewhere, unless such property is a designated facility under the County Plan or such disposal is otherwise specifically permitted under the Plan or other applicable laws and regulations.

D. It shall be unlawful for any person to scavenge any material from any municipal waste or source separated recyclable materials that are stored or placed for subsequent collection within the County without prior approval from the County, the local municipality and the generated of such waste or materials.

E. Nothing in this ordinance shall be deemed to restrict or prohibit the use of a fully-permitted captive C&D waste disposal facility be the owner/operator/permittee thereof for its own private captive use for its own C&D waste only; provided, however, that such owner/operator/permittee must comply with the transporter licensing and reporting requirements of this Ordinance.

F. It shall be unlawful for any person to salvage or reclaim any solid wastes within the County except at an approved and permitted resource recovery facility under Act 97 and Act 101.

Section 5 - Standards for Collection and Transportation

A. All municipal waste collected within the County shall be conveyed by the collector or Transporter to a transfer station, processing facility, and/or disposal site designated by the County pursuant to the approved MSW Plan.

B. All trucks or other vehicles and equipment used for collection and transportation within the County of municipal waste generated within the County must comply with the requirements of Act 97 and Act 101

C. All Transporters shall be responsible for maintaining a current list of customers serviced and records of the amounts and types of waste collected within the County. Such records and customer lists shall be available for inspection and be provided to the County or its designated representatives upon request.

Section 6 - Reporting Requirements

A. All transporters shall maintain current, up-to-date landfill receipts and/or weigh tickets for three (3) years regarding all waste transported, collected and /or hauled within Erie County. Such records shall be subject to inspection at any time and shall be made available to the Recycling Program or its authorized agents upon request.

B. Quarterly, or when notified to do so by the Recycling Program, a transporter shall submit a report (on forms prepared by the Recycling Program) to the Recycling Program regarding all waste collected and/or transported by it within Erie County. At a minimum, the following information may be included in each such report as request by the Recycling Program.

- 1) The name of each municipality in the County in which the collector provided service, and a reasonable estimate of the total weight of each type of municipal waste collected from each municipality listed separately by commercial and residential sources
- 2) Transporters of recyclables shall provide, by municipality, the volume and weight of each type of recyclable material and also the name, location and permit number of the material recovery processing facility or end market, which accepted the material listed separately by commercial and residential sources.
- 3) The name of each processing or disposal facility used during the reporting period and total weight of each type of municipal waste and recyclables that was delivered to each facility during the reporting period;
- 4) Copies of landfill receipts or weight tickets; and
- 5) Such other information as the County may request

Section 7 - Penalties and Enforcement

A. In the event that any person or transporter is found to be in violation of this Ordinance, the County may issue a written notice of violation to the alleged violator. This notice shall be in writing and sent by certified mail with return receipt requested. The notice shall state the nature of the violations(s) and the necessary corrective actions required in detail. The person notified shall be provided ten (10) days to correct the violation(s) or appeal.

B. If the person or transporter found in violation of this Ordinance fails to take corrective action or appeal during the allotted ten (10) days, a citation will be filed at the appropriate district justice office.

C. Any Person violating any provision of this Ordinance shall, upon conviction thereof in a summary proceeding, be sentenced for each violation to pay:

- First Offense: A fine of \$100 plus costs of prosecution.
- Second Offense: A fine of \$300 plus costs of prosecution.
- Third Offense:
- In default of the payment of such fine and costs, to undergo imprisonment for not more than ten (10) days

Each violation of any provision of this Ordinance and each day that such a violation shall exist, shall constitute a separate violation and offense.

C. In addition to any and all other legal and equitable enforcement powers and remedies otherwise available to it, the County may institute a suit in the Court of Common Pleas of Erie County, Pennsylvania for an injunction, either mandatory or prohibitive, to enforce any of the provisions of this Ordinance. In any proceedings brought by the County (whether legal or equitable in nature) to enforce this Ordinance, the Court may reward the costs of litigation, including without limitation reasonable attorney's fees and expert witness fees, in favor of the County whenever the Court determines such an award is appropriate.

D. The sanctions, penalties, and remedies set forth in this Ordinance are cumulative and concurrent, and the existence of or exercise of any remedy hereunder shall not be deemed to be exclusive or prevent the County from exercising any other right or remedy available to it at law, in equity, and/or hereunder.

Section 8 – Implementation

The Recycling Program shall have the power to implement and enforce the provisions of this Ordinance. Its responsibilities shall include, but not be limited to:

- 1) Development of reporting forms;
- 2) Compilation of waste stream data;
- 3) Monitoring of flow control compliance; and
- 4) Enforcement of all ordinance provisions.

Section 9 – Municipal Responsibility

After the effective date of this Ordinance, when any Erie county municipality contracts with a transporter for collection of municipal waste, the municipality shall specify that:

- a. All municipal waste shall be disposal of at the designated facilities under the County MSW Plan; and

- b. All transporters utilized under such municipal contracts shall follow the provisions of this Ordinance concerning collection, transportation, and disposal of solid waste and recycling.

Section 10 - Severability

In the event that any section, paragraph, sentence, clause or phrase of this Ordinance, or any part thereof, shall be declared illegal, invalid, or unconstitutional for any reason, the remaining provisions of this Ordinance shall not be affected, impaired or invalidated by such action.

Section 11 – Conflict

A. Any ordinances or any part of any ordinances of Erie County which conflict with this Ordinance are hereby repealed insofar as the same is specifically inconsistent with this Ordinance.

B. Any ordinances or any part of any ordinances of any municipality within Erie County which conflict with this Ordinance are hereby superseded pursuant to 304(d) of Act 101, insofar as the same are inconsistent with this Ordinance, but the remaining provisions of such ordinances shall not be superseded, affected, impaired, or invalidated by this Ordinance.

Section 12 - Effective Date

This Ordinance shall be effective on August 1, 2015, and shall supersede and replace in its entirety Erie County Ordinance No. 96, 1995 as of August 1, 2015; furthermore, Erie County Ordinance No. 96, 1995 shall remain in full force and effect until and through July 31, 2015.

References and Acknowledgements

The following books, documents, articles and other publications were used as professional sources of information during the development of the Plan revisions.

Biosolids Disposal in Pennsylvania. 2007. Department of Agriculture. Penn State University, State College, Pennsylvania

Construction & Demolition Debris Industry Study. 2007. Commissioned by The Massachusetts Department of Environmental Protection. Boston, MA

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County Population Projections: Pennsylvania 2010-2030. 2010. Pennsylvania State Data Center. Harrisburg, Pennsylvania

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Handbook for the Collection, Transportation, Disposal and Land Application of Residential Septage in Pennsylvania. 2008. Pennsylvania Department of Environmental Protection, Harrisburg, Pennsylvania

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Municipal Solid Waste in the United States, 2001. Prepared for the United States Environmental Protection Agency by Franklin Associates, Prairie Village, Kansas

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Pennsylvania County Data Book Erie County. 2011 Pennsylvania State Data Center, Institute of State and Regional Affairs, Harrisburg, Pennsylvania

Pennsylvania Infectious and Chemotherapeutic Waste Plan. 1990 Prepared for the Pennsylvania Department of Environmental Resources by Jack Faucett Associates, Inc.

Pennsylvania Licensed Infectious and Chemotherapeutic Waste Transporters Registration 2011. Pennsylvania Department of Environmental Protection, Bureau of Land Recycling and Waste Management. Harrisburg, Pennsylvania

Pollution Prevention Measures from Unwanted Pharmaceuticals. 2005. Gualtero, Sandra. Department of Earth and Environmental Engineering, Columbia University, New York, New York

Population Census 2010. 2011 U.S. Bureau of the Census, Washington, D.C.

Residential Open Burning in Pennsylvania. Fact Sheet. Pennsylvania Department of Environmental Protection, Bureau of Air Quality. Harrisburg, Pennsylvania

Saving Lives, Saving Earth, Saving Money. 2008 Jo Ciavaglia. Bucks County Courier Times, Levittown, Pennsylvania

Sewage Sludge and Septage Management in Pennsylvania. 1998 Pennsylvania Department of Environmental Protection, Harrisburg, Pennsylvania

APPENDIX E

Meeting Minutes and Public Comments

MEETING MINUTES FEBRUARY 21, 2013

Solid Waste Advisory Committee (SWAC) Meeting Minutes			February 21, 2013	
			10:00am – 11:45am	
			Bayfront Convention Center	
Meeting called by:	Don Blakesley, Erie County Recycling Coordinator	Facilitated By:	Michelle Nestor, Nestor Resources, Inc.	
Attendees:	Don Blakesley (Erie County Recycling), Michelle Nestor (Nestor Resources, Inc.), AJ Drelick (ECS&R), Matthew Pluta (Environment Erie), Bob Roach (Environment Erie), Lindy Platz (Girard Township), Tim May (Harborcreek Township), Krista Jelley (Harborcreek Township), Melanie Johnson (Erie Regional Chamber & Growth Partnership), John Buchna (Erie Downtown Partnership), Jake Welsh (Erie County Department of Planning), Jeremy Lincoln (Lincoln Recycling), Pete Ogden (Lawrence Park Township), Karen Tobin (Erie County Department of Health), Jessica James (Millcreek Township), Jenny Sholtis (GoErie.Com), Curt Chaney (Erie Times News), Honey Stempka (Green Building Alliance), & Nancy Agostine (Summit Township)			
Orientation Meeting				
<div>✓ Introduction from Don Blakesley</div> <div><div>○ The Solid Waste Advisory Committee planning process will take approx. 18 months and will conclude after 6-8 meetings</div><div>○ The new 10-year plan should be ready for approval in June 2014</div></div> <div>✓ Orientation from Michelle Nestor</div> <div><div>○ Two-part agenda: scope of municipal waste & plan approval</div><div>○ Planning for municipal waste helps us to save money<div>▪ 75% of cost to residents is transportation, 25% of cost is disposal</div></div></div>				

- In the past (1970s), there were approximately 1,100 landfills in Pennsylvania and 15,000 in the USA
 - Municipality dumps served as “Saturday family excursions” for disposing of materials that had accumulated for the week
- Roles of Act 101
 - Cost of design transferred from a publicly-operated facility to private sector-owned after passing of Act 101 legislation
 - There were approx. 20 curbside programs at this time
 - Powers were taken away from municipalities and given to counties
 - Counties usually looked for enough landfill capacity, however Erie County choose not to operate their own facility
 - Municipalities were encouraged to rely on the private sector that was already available
- PA Department of Environmental Protection (DEP) responsibilities
 - Required municipalities to implement and enforce mandates
 - Offered performance grants to aid programs with funding
 - Municipalities continue to touch residents and businesses daily, enforce ordinances, deal with complaints, and negotiate hauler contracts
- Fundamental Concepts
 - The County is the agent to enact and enforce the 10-year plan
 - Staff at the county level was tasked with tracking haulers
 - Fees were often attached for processing registering allowing county and municipality officials to track tonnages
 - These permits are no longer permitted once the state-wide authorization bill took away licensing
 - Counties and municipalities may consider registering haulers if no fee is attached, however without fees businesses do not feel compelled to do so
 - Without registration, tonnage is often hard to track down for county reports and performance grants
 - Counties do not usually have a hand in disposal options for residents
 - Erie County does provide free recycling drop-off locations for residents as well as the ongoing one-day HHW & E-Waste collection events

- The HHW & E-Waste collection event administered by the county is a great outlet for handling special wastes especially in light of the recent E-Waste ban (Covered Device Recycling Act of 2010 went into effect on January 24, 2013)
 - Counties also takes on the responsibility of helping municipalities find and apply for grant funding opportunities
- Additional Assistance
 - Nestor Resources, Inc. available for consultation
 - Michelle Nestor aided Millcreek Township to increase commercial recycling compliance and reporting efforts from businesses
- Moving the Plan forward
 - The SWAC will delve into recyclables breaking each down material by material
 - Municipality score cards will be compared to the national level
 - Introductions to the nationwide changes that will affect the future
 - Continue to schedule SWAC meetings as milestones are reached
 - Approval process completed after the SWAC makes suggestions, public comment period, and adoption by commissioners before final approval from the PA DEP
 - Substantial Plan Revision – voting required for approval to move forward at this stage
- ✓ **Open Discussion: What does the SWAC need to address during the planning process?**
 - Erie County Health Department concerns:
 - Illegal dumping incidents were easier to investigate when haulers were licensed
 - Overall, illegal dumping has decreased
 - ECHD will continue to investigate and will aid in neighbor feuds over dumping
 - Certain costs are involved to municipalities and counties for the clean-up of these sites
 - Consolidation of service providers and haulers
 - Negative impact during contract negotiations and bidding
 - Nestor will cover ways to negotiate and implement contracts so that municipalities are receiving full potential from the hauler at the best price available
 - Summit Township Concerns:

- Illegal tire dumping from commercial entities and haulers
- Curbside recycling
 - Most of Erie County represented at the meeting have a good handle on curbside recycling with residents
 - Springfield Township, among others, have lost curbside recycling in collection consolidations
 - Those that do not have curbside recycling are provided with a drop-off location nearby
 - Six communities out of Erie County are mandated to recycle with curbside costs (Millcreek Township's quarterly fee = \$60.54)
- Girard Township concerns:
 - Yard Waste must be sent to Millfair Compost & Recycling Center
 - Residents often feel that Millcreek Township is too far of a drive to haul leaves & brush in
- Harborcreek Township observations:
 - The use of the 65-gallon bin for curbside has substantially increased the amount recycled by residents
- Commercial Recycling Reports
 - Staffing capabilities is not present within smaller townships and boroughs to report accurately
 - Don would like to create an online form for report to mainstream the current process and would like interaction as to the obstacles they face in obtaining tonnage reports from haulers and businesses
- Erie Downtown Partnership concerns:
 - Outside collection receptacles are missing on the downtown streets
 - Believes small businesses and offices are a sector of the commercial accounts that are lacking recycling and proper education to do so effectively
- RecyclErie was formed to address this commercial population (particularly bars and restaurants that were missing from the recycle reports)
 - RecyclErie provides incentives such as indoor bins, reduced recycle collection from WM, window decals, coasters, advertising, and award recognition for free
 - The program will look to expand into offices and schools for the near future

- It was concluded by the SWAC that schools seem to have one of the lowest recycling rates of any sector despite being provided with bins and education

✓ **Key Indicators**

○ Trends

- Markets for recyclables items used to be located within 50 miles of collection
- Presently, many paper products are being shipped to China and India because they do not have the tree or resources to harvest the material
- Waste generation grew faster than the population rate which was stimulated by President Dwight Eisenhower's advice for economic stimulation – "Buy!"
- This new though process created a new generation of disposers

○ Changes in Composition

- In 1960, roughly 90% of materials ended up in the landfill
- Currently, 40% of materials are recovered, while 60% is ending up in a landfill
- As of now, Americans are creating less waste on the whole
 - Environmentally conscious trends and "green" lifestyles are popular
 - Business models have changed
 - "Walmart" Theory – paper and cardboard disposal were costing big businesses a lot in fees. Businesses demanded less packaging and as a result, packaging of plastic shrink wrap replaced cardboard and paper
 - Plastic may be used to begin producing a synthetic fuel

○ Weight, Volume, and Material Handling

- Tonnage reports for recycling may be decreasing because plastic takes more material accumulation to reach 1 ton as opposed to cardboard
- Consumers will generate 38% less paper in 2015 than in 2008 due to online billing, email, etc.
- Yard waste and food still make up a large portion of the waste stream (approx. 30%), while electronics and HHW only accounts for approx. 2%

○ Industry Forecasts

- Waste management culture to material recovery culture notions

- Increase in remanufacturing and producer responsibilities (seen in Covered Device Recycling Act)
- Shifting organics/recycling collection to every week and reducing trash to every other week
- China and India's middle class will begin consuming more materials than all Americans combined and as a result, will recover their own materials locally
- Trend towards single-stream material recovery facilities (MRFs) and recycling transfer facilities
- Digesters and in-vessel composters producing energy
- "Zero Landfill" philosophies will replace the ideology of "Zero Waste"
- A Debris Management Plan that incorporates recycling will help municipalities recover funds from FEMA faster with proper recycling documentation
- Don's Concluding Remarks:
 - Electronic Age is changing the waste stream and causing some illegal dumping and pollution
 - The County's collection program will help address this issue while keeping the costs for disposal to a minimum
 - Predictions for new trends are hard to predict, but if a new technology changes the recycling curve, the SWAC can revise the plan over the next 10 years to keep the plan relevant
 - Current Solid Waste Plan is available online and suggested reading material before the next committee meeting
 - Core Committee of 6-8 people will be formed to attend all meetings and relay back to all members of the SWAC
 - Don will also email out all contact information of those on the Solid Waste Advisory Committee

✓ **Open Forum Discussion**

- Millcreek Township's concerns:
 - Problem with haulers and businesses breaking out tonnages by zip code instead of municipality for Annual Recycling Report
 - Michelle encourages businesses to report using tax codes rather than zip codes

- Glass recovery in bars and restaurants
- Commercial haulers charging separately for trash and recycling often allows businesses to omit recycling despite local ordinances
 - Michelle suggests that municipalities write ordinances that force haulers to charge the two services as one fee
- Erie Regional Chamber & Growth Partnership's goals:
 - Chamber would like to promote a business culture among Erie businesses that has a positive environmental message – “This is the right thing to do.”
 - Having this mindset in our community would allow everyone to promote Erie as the regional “hub” for progressive and sustainable practices
 - Social norms will be created through education
- Erie Downtown Partnership & Lincoln Recycling's concerns:
 - Cigarette Butt littering and streamside pollution
 - Many new cars are manufactured without ash tray, prompting drivers to flick butts out the window
 - While there is not a Keep PA Beautiful chapter in Erie, Environment Erie is offering a grant through the organization to obtain bins for cigarette butts
 - Many cigarette butts are collected and tracked through the International Coastal Clean-Up, which takes place along Erie's waterways every September
- Abandoned Equipment/Farm Machinery
 - May cross a fine line into agricultural waste
 - Farm properties often face a new liability for the pesticides, abandoned equipment, etc.
 - Upon selling, properties may face a decrease in value unless an educational outreach program is extended to the generation of farmers

✓ **Meeting adjourned at 11:45am**

Solid Waste Advisory Committee (SWAC) Meeting Minutes			April 25, 2013	
			10:30am – 12:00pm	
			Bayfront Convention Center	
Meeting called by:	Don Blakesley, Erie County Recycling Coordinator	Facilitated By:	Michelle Nestor, Nestor Resources, Inc.	
Attendees:	Don Blakesley (Erie County Recycling), Michelle Nestor (Nestor Resources, Inc.), AJ Drelick (ECS&R), Matthew Pluta (Environment Erie), Lindy Platz (Girard Township), Melanie Johnson (Erie Regional Chamber & Growth Partnership), John Buchna (Erie Downtown Partnership), Jake Welsh (Erie County Department of Planning), Jeremy Lincoln (Lincoln Recycling), Karen Tobin (Erie County Department of Health), Jessica James (Millcreek Township), Sarah Galloway (City of Erie)			
Orientation Meeting				
<div>✓ Recycling Achievements</div> <div><div>○ New national numbers will be compared against Erie County’s for the next meeting</div></div> <div>✓ Designated Disposal Sites</div> <div><div>○ 3 in PA (Erie County, Elk County, and Butler County)</div><div><div>▪ Most waste produced from Erie County will be disposed of within 100 miles of the county, but the Lakeview Landfill does get the majority of the waste</div></div><div>○ 2 out-of-state sites</div><div>○ 2 Permitting Issues (One has since closed due to permitting problems)</div><div>○ Seneca gets a trickle of Erie’s County’s waste, but most is made up of sewage sludge</div></div> <div>✓ Transfer Stations</div> <div><div>○ Waste Management’s Transfer Station is located at 1154 West 16th Street, Erie, PA 16502</div><div><div>▪ Collecting recycling from Waste Management customers and City of Erie</div></div></div>				

- Collecting refuse from City of Erie and storing on-site until Lakeview Landfill opens daily

✓ **Loss of Recycling & Waste**

- 25,000 to 28,000 tons of waste was lost from 2005-2012
 - Packaging has decreased over time
 - Glass packaging has made a shift to plastic packaging
 - Less paper being used with electronic mail, etc.
- May be a result of the population recycling more and/or just disposing of less
- Transient populations
 - College students arrive in fall and leave in spring (Penn State Behrend, Mercyhurst University, Mercyhurst North East, Gannon University, Edinboro University, LECOM, and Fortis Institute)
 - “Snow birds” leave during winter months and return for Erie’s summer months
- Poor economy in 2009
- Single Stream Recycling initiated in 2010-2011
 - **Concern: A drop in trash hauling makes professionals wonder if waste is going “elsewhere” or being illegally dumped

✓ **Undesirable Disposal Practices**

- Illegal Dumping
- Littering
- Open Burning
- Theft of Service
- Drop-Off Contamination

✓ **Survey & Map of Illegal Dumping “Hot Spots” in Erie County**

- Gathered by PA CleanWays (now known as Keep Pennsylvania Beautiful)
- Survey not 100% accurate because of limitations
 - Surveyors were forced to stay in their car along public roads
 - Did not travel on private roads for safety purposes

- Last illegal dumping survey was completed in 2005 and sites may have been cleaned up in the last 8 years
- 4 “No Dumping” and “Fine” signs posted – all 4 sites were still active despite signage
- It was suggested that the cluster of illegal dumping seen on Erie County’s survey may fall along railroad tracks and service roads
- **Request: Jake Welsh (ECDP) would like a raster file of the illegal dumping sites to overlay with current maps and GIS files
- **Sarah Galloway will be providing a list of habitual dump sites within the City of Erie

✓ **Effects of Illegal Dumping**

- Affects tourism
- Decreases property values
- Will deter commercial businesses from entering area

✓ **Illegal Dumping Offenders**

- Offenders are not random and dump intentionally
 - Small private haulers that are paid contractors
 - Waste authorized haulers registered with the state
 - Remodelers (illegal dumping and burning)
 - Residents refusing to pay for trash hauling services
 - Residents unafraid of consequences (and a lack of enforcement)
- Open Discussion from SWAC
 - Littering is occurring in broad daylight
 - Cities typically collect trash despite cutting someone off for service
 - Multi-family occupants and renters feel a lack of responsibility for maintaining trash
 - Requests for a local chapter of Keep America Beautiful organization

✓ **Enforcement & Prosecution**

- Cameras may be installed to catch illegal dumping in the act – video evidence holds up in court
- Education for local law enforcement and magistrates

- Imposing fines – some environmental laws allow prosecutors to count each piece of trash as a separate act of littering (Typical fines of \$300 each)
- Neighboring counties take the lead
 - Lawrence County experiences 100% winnings in courtroom, Sheriff typically issues citations
 - Allentown/Reading allow Recycle Departments to issue citations, some of which are published
 - Offenders have been known to be very apologetic!
- Hiring a Joint Enforcement Officer
 - Helps all municipalities in filing ordinance violations
 - Cheaper than using a police force to issue citations
 - Less personal approach
- Erie County Health Department will issue citations for illegal dumping through District Judge
- Dumpers have been known to return even after a dump site has been cleaned up

✓ **Littering**

- Some accidental occurrences, mostly intentional
- Accumulate most at transition points
- Open Discussion from SWAC
 - Repeat Offenses: Cigarette Butts
 - San Francisco spends roughly \$11 million per year on cleaning up cigarette butts
 - SF would like to pose a tax on cigarettes to provide funding for clean-up
 - Make up 28-30% of all clean-ups
 - Erie Downtown Partnership collects over 6,000 cigarette butts littered every 24 hours in a 70-block radius
 - **John Buchna will be providing Don with the statistics from his daily clean-up of downtown Erie
 - Cities can experience a 46% reduction in cigarette littering by putting the proper receptacle in the right location

- Despite available receptacles, Erie County faces behavior issues at bus stops and “mid-block” as well as stop signs and stop lights
- “Shame education” makes littering socially unacceptable
- In the past, judges did not take student groups seriously with litter concerns
- A large marketing approach and media campaign could refocus residents
- Involve local Neighborhood Watch Programs in beautification and clean-ups
- Educate business owners and Township Supervisors
- Environment Erie recently received grant monies from KAB for portable cigarette dispensers
- Repeat Offenses: Electronics
 - Unintended consequences for dumping broken electronics containing heavy metals (considered a DEP HHW spill)
 - Prior to the E-waste landfill ban, the City of Erie collected electronics during their 4-week Spring Collection Cleanup, while other townships have had one-day collections
 - Millcreek Township and Harborcreek Township have set up an “At-Your-Door” Collection with Waste Management (fees for pickup included with quarterly bill)
 - Millcreek Township’s participation in the WM At-Your-Door Program doubles state rate and triples national rate
 - New York appears to be ahead of the curve on electronics collection since their electronics ban was passed in 2011 giving them some time to cope and adapt
 - With the new Covered Device Recycling Act (CDRA), Processors only have to account for 30% of electronics recovery. Once 30% is met, transporters are cut off leading to warehouses full of electronics (illegal dumping)
 - Drop-Facilities
 - With drop-off facilities, senior citizens do not have the ability to find assistance or transportation in delivering their e-waste
 - Volunteers may be interested in collecting and transporting electronics during United Way Day of Caring
 - Residents concerned with pre-registering for event and not being able to make scheduled appointment

- No centralized point in Erie County makes an accessible site for all municipalities difficult to locate
- Untapped funds for supporting electronic collections through large corporation grants
- Repeat Offenses: Construction & Demolition Waste
 - Some municipalities require building permits and demolition permits (some recycling required within these permits)
 - Residents and contractors must produce receipts or will receive a fine
- Repeat Offenses: Household Hazardous Waste (HHW)
 - Lowes & Home Depot are large producers of HHW and should be forced to collect back within stores – producer responsibility
 - Latex paint is not considered hazardous and paint drying packets are available at some hardware stores and/or municipality buildings
- Repeat Offenses: Miscellaneous
 - Cat Litter/Organics in recycle bin
 - Gum
- Strategies for dealing with littering
 - International Coastal Cleanup - occurs on one Saturday in September each year
 - 2 million butts picked up world-wide last year
 - **County will retrieve data from last several clean-ups
 - City of Erie
 - Code Enforcement, Streets Office, Parks Office
 - Littering picked up periodically
 - 1-day event for tire collection
 - City has held event for 8 years
 - Small businesses often take advantage of residential program
 - RecyclErie
 - Will provide indoor recycle bins for free to businesses wanting to improve their program

✓ **Closing Remarks**

- A study performed within Walt Disney World's theme parks found that visitors would not walk more than 10 steps before not recycling and/or littering
- Erie's lakefront community is our sense of pride! Keep it clean for tourism and the environment!

MEETING MINUTES SEPTEMBER 5, 2013

Solid Waste Advisory Committee (SWAC) Meeting Minutes			September 05, 2013	
			10:00am – 12:00pm	
			Tom Ridge Environmental Center	
Meeting called by:	Don Blakesley, Erie County Recycling Coordinator	Facilitated By:	Michelle Nestor, Nestor Resources, Inc.	
Attendees:	Don Blakesley (Erie County Recycling), Michelle Nestor (Nestor Resources, Inc.), Matthew Pluta (Environment Erie), Lindy Platz (Girard Township), John Buchna (Erie Downtown Partnership), Jake Welsh (Erie County Department of Planning), Jessica James (Millcreek Township), Kurt Duska (Engineered Plastics), Ann Quinn (Penn State Behrend), Tim Malesiewski (Waste Management), Ron Salisbury (Erie County Dept. of Health), Maggie Stablein (Borough of Edinboro), Vicki Wintemute (Elk Creek Township), Bob Roach (Environment Erie), Regina Schweinsberg (PA Dept. of Environmental Protection)			
SWAC Meeting #3				
<div>✓ What Makes for a Successful Program</div> <div><div>○ Convenience, capacity, communication (education projects)</div><div>○ Give enough space for residents to store recyclables between pickups</div><div>○ Curbside is preferred (bi-weekly collection at the minimum) vs. Drop-off</div><div>○ Recycling collection on the same day as trash collection</div><div>○ Mandatory/Contracted Services preferred vs. voluntary areas</div></div> <div>✓ Results of Municipal Survey</div> <div><div>○ 18-19 Counties represented within survey</div><div>○ Paying a flat fee for any volume of trash is a disincentive for recycling</div><div>○ Good systems – bundle recycling with waste, provide curbside pickup, and an unlimited volume of recycling</div><div>○ Poor systems – Volume based on carts</div></div> <div>✓ Sources of Recyclable Material</div>				

- Commercial Curbside > Residential Curbside > Residential Drop-off > Commercial Drop-off
- Residents are doing a great job with complying to Act 101, while Commercial has not reached full potential

✓ **Actual vs. Expected Results**

- National Average = 35% Diversion Rate goal
 - Cardboard = 91% recovered
 - Plastic #1-7 = 12% recovered
 - Plastic #1-2 = 29% recovered
 - Glass = 54% recovered
 - Batteries = 96% recovered
- Erie County Averages
 - Furniture = 266%
 - Textiles = 0.03% (Collected curbside in Philadelphia, PA)
 - Yard Waste = 130%
 - Plastics #3-7 = 116%
 - Aluminum Cans = 104%
 - Newspapers = 83% (could be skewed due to the size of the Erie Times News)
 - Batteries = 5%
 - Mixed Papers = 82%
 - Corrugated Boxes = 37%
 - Paperboard Boxes = 94%
- Improve ideas for recycling by looking at the total % of MSW
- Utilize Penn State Behrend students to do a pilot study to understand the viability of the cost analysis of recycling vs. landfilling
- Improve commercial recycling by having businesses within a close proximity share a recycling dumpster (a central location with locks)

✓ **Collection Results**

- Different rate structures for recycling between municipalities:

	<ul style="list-style-type: none"> ▪ Bundles with trash/recycling costs (incentive) ▪ Free ▪ Separate line item ▪ Sticker tag
	<ul style="list-style-type: none"> ○ Effective Collection Frequency for Recyclables <ul style="list-style-type: none"> ▪ Most Erie County municipalities reported collection every week, however a small group administers recycle collection every other week ○ Leaf and Yard Waste <ul style="list-style-type: none"> ▪ Mostly seasonal collections reported, curbside pickup on collection day ○ Mandated Ordinances within Erie County <ul style="list-style-type: none"> ▪ Illegal Dumping Ban (could be stronger in some municipalities) ▪ Open Burning Ban ▪ Open Burning Banned Conditionally (Small bon fires permitted) ▪ Mandatory Waste Collection ▪ Municipalities could improve ordinances by adding a Recycling Mandate
✓	Non-Recyclables <ul style="list-style-type: none"> ○ Plastic cups & Plates ○ Plastic Bags ○ Diapers
✓	Open Discussion <ul style="list-style-type: none"> ○ Textile Recycling <ul style="list-style-type: none"> ▪ Erie County Recycling Program <ul style="list-style-type: none"> • Concerned about textile recycling – over 40% of what goes to charities (Salvation Army, Goodwill, Erie City Mission, etc.) goes directly to third-world countries or is recycled into industrial rags ○ Economic Advantage and Models for Residential Recycling <ul style="list-style-type: none"> ▪ Engineered Plastics <ul style="list-style-type: none"> • Would like to see the economic advantage and/or model to increasing recycling at the curbside for residents

- Does recycling cut down on the costs for disposal?
- Waste Management
 - Residents will save money on certain types of recycling contracts
 - 75% of expenses come from labor and fuel, while 25% come from disposal costs
 - Subscription Service (North East) = over \$100/quarter
 - Municipal Contract Service (Millcreek) = \$60/quarter
- Erie County Recycling Program
 - Creating consistent messaging and maintaining updates each year would allow for more effective tracking methods
 - Projecting models over the next 10 years is somewhat difficult due to the varying nature and trends of commodities (supplier to consumer demands)
 - Franklin & McKean Townships are not mandated to recycle because the population density is not high enough. As a result, recycling fees are high.
- Increasing Commercial Tonnage
 - Engineered Plastics
 - Suggests encouraging commercial accounts to increase recycle tonnage by sharing containers among businesses
 - If recycling is not profitable, it is not sustainable
 - Waste Management
 - Can be tough to manage due to key distribution or delinquent payments
 - Erie Downtown Partnership
 - Would like to create pilot models downtown
 - Need commercial willingness to participate from retailers, shops, offices, bars, and restaurants
 - Erie County Recycling Program/Nestor Resources
 - Some cities include commercial pickups within residential contract
 - Recycling is mandated within the commercial sector, but some municipalities are not enforcing the mandates

- Must encourage the establishments to increase recycle dumpster volume and frequency of collection and reduce those of trash in order for establishments to save money
- The County, all municipalities, and corresponding organizations needs to stay in the face of commercial business owners so that the mission does not die off over time
- It would be most beneficial for Townships to mandate that haulers bundle the cost of recycling with the trash collection fees within their ordinances and contracts
- Mobile recycling units have been used in other cities with a “How-To” guide for nearby vendors
- Millcreek Township
 - After walking door to door with the RecyclErie program, it was discovered that businesses were not willing to participate if by recycling, the establishment incurred additional costs
 - Bins or indoor containers need to be issued to businesses in order to get businesses into compliance
 - Prices range from \$5 for an office bin to \$75 for an outdoor, steel bin
- Penn State Behrend
 - Working with Regional Sustainability Group
 - Would like to work with Behrend students to come up with a pilot study for determining the cost analysis of recycling
 - Hosting a seminar on Sept. 19th from 4:00-5:00pm at Penn State Behrend (Reed Building) for discussions on items that are recyclable at the curbside
 - Could Waste Management provide an updated comprehensive list of what is accepted at Neville Island in Pittsburgh?
- Erie County Health Department
 - Concerned with health violation codes of all containers
 - Can supply a listing of schools, bars, and restaurants in the Erie area that may be targeted for increasing recycling tonnage
- Electronics and Household Hazardous Waste Collection
 - Erie County Recycling Program

- If a private company can service all HHW and E-Waste collections, then the County may no longer need to be involved in managing the collections
- A program like the WM At-Your-Door Program should be created for small businesses as well as residents

✓ **Closing Remarks**

- A Recycling Directory would be extremely beneficial helping municipalities and residents locate the programs that are available within their community
- This document would need to be updated yearly
- Requires input from county, haulers, municipalities, nonprofits, for-profits, educational institutions, etc.

✓ **Meeting adjourned at 12:00pm**

MEETING MINUTES JANUARY 30, 2014

Solid Waste Advisory Committee (SWAC) Meeting Minutes		January 30, 2014	
		10:00am – 11:30am	
		Tom Ridge Environmental Center	
Meeting called by:	Don Blakesley, Erie County Recycling Coordinator	Facilitated By:	Michelle Nestor, Nestor Resources, Inc.
Attendees:	Nancy Agostine (Summit Twp), Don Blakesley (Erie County Planning Dept.), John Buchna (Erie Downtown Partnership), Sarah Galloway (City of Erie), Jessica James (Millcreek Township), Jeremy Lincoln (Lincoln Recycling), Tim Malesiewski (Waste Management), Guy McUmbur (PA DEP), Michele Nestor (Nestor Resources), Lindy Platz (Girard Township), Matt Pluta (Environment Erie), Regina Schweinsberg (PA DEP), Honey Stempka (Green Building Alliance), Karen Tobin (Erie County Dept. of Health), Jake Welsh (Erie County Dept. of Planning), John Vanco (Erie Art Museum), & Ann Quinn (Penn State Behrend)		
SWAC Meeting #4			
<div>✓ <u>Recycling Survey Sent Out</u><ul style="list-style-type: none">○ 33/38 Municipalities Responded (87% responded), This is 95% of the population of Erie County○ RFP for disposal capacity was also sent out</div> <div>✓ <u>Survey Results</u><ul style="list-style-type: none">○ 19 Municipal Programs vs. 19 subscription services○ 84% of population has an organized program</div> <div>✓ <u>Joint Contracts</u><ul style="list-style-type: none">○ Dense areas combining with rural areas might raise the contract fees for those in the dense, smaller cities (cost savings might not be there like originally suspected)○ Lower rates would only surface if competing haulers went to bid (Erie County is mainly served by one hauler – Waste Management)○ Coordinators need to be careful with advertising for joint municipal contracts if pricing does not benefit both sides > need to take a more methodical approach</div>			

- Demographics do not usually change much across the state borders for contracting
- However, some townships have a diverse population change from North to South in the municipality > this is where joint contracts are effective
- COG contracts – haulers usually hurt dense areas to get their costs back
- City of Erie – collect their own trash, but also take on violators as well (million dollar debt) >
- This debt scares haulers, but cities can put lien on house

✓ **Survey Analysis**

- Pounds Per Home Per Week (Residential/Commercial)
 1. City of Erie
 2. Millcreek
 3. Summit
 4. Harborcreek
- Residential – carries weight of report
- Commercial – LOW! (Need to chase reports)
- Commercial are recycling, but are not reporting back
- No incentive for them to send in reports since hauler licensing was revoked
- Might not have to chase access to recycling, but rather reported tonnages from businesses
- State is updating reporting online in ReTRAC System
- Some systems allow commercial entities to report directly through Excel sheets
- Act 90 Authorization – safety licenses or driving to Ohio landfill does not put haulers out of business
- Recycling is sometimes another line item on the bill that municipalities or residents do not want

✓ **Waste Management Driver Observations & Group Discussion**

- Recycle Drop-Off Bins (On Robison Road)
 - Always full, even clean material
 - Numbers reported to Summit, not County
- Potential to boost per home numbers

- 5th generation of Recyclers
 - Avid recyclers tend to throw “everything” in the blue bin leading to higher residue rates
 - 19% residue rate from WM is average
- Municipality Coordinators may find it beneficial to spot audit commercial establishments
- WM trucks do not have scales on trucks to weigh commercial entities individually
- GLASS is a problem
- Possibility of including smaller commercial generators into residential contracts (only for recycling)

✓ **CDRA**

- More electronics recycling, but still flaws in the law
- County making change to HHW collection, but keeping HHW Center
- Some illegal dumping of electronics in City of Erie & near landfill in Summit
- Residents should be charged for recycling item during initial purchase
- Not charging for electronics for the County during the first year was costly to the County! Grants do not cover all the costs!
- Pennsylvania should follow California model for recycling TV's - \$5.00 deposit

✓ **Tires**

- Holding tire collection days has been very helpful in cutting down on illegal tire dumping
- Residents should be charged for recycling item during initial purchase

✓ **Educational Ideas**

- “*Recycling Impossible*” Program > 2 day SWAT team intervention
- Sending the message that recycling is not just environmental or the law, but economical

✓ **New Outreach Avenues**

- Municipality Interviews and Supervisors Meetings
- WQLN Commercials
- Facebook
- Twitter

- Municipality Website
- Print Media: GoErie, Erie Reader, Marketplace Gazette
- TV Media Exposure: Event Interviews
- Green Expo Nights (Seawolves, Bayhawks, Explosion, etc.)
- Festivals, Special Events, and Educational Workshops (Environment Erie Youth Training Days)
- Municipality Calendars (Mailed Out)
- Quarterly Magazines and Newsletters
- Community Calendars (Showcase & Online)
- Postcard Mailers

✓ **The Next Steps ...**

- Start to receive clumps of the plan to approve ahead of time for future discussion
- Passed out booklet: *Recommendations for Designation of Disposal & Processing Facilities*

✓ **Disposal Facilities RFP (non-competitive)**

1. Advanced Disposal
2. Casella
3. Vogel
4. Waste Management
 - Cap for the most the landfill could charge haulers
 - Great for facilitating disaster management
 - No glitches or surprises from process
 - Meets Federal requirements

✓ **Meeting Adjourned at 11:30am**

APPENDIX F

Resolution to Adopt the Plan

RESOLUTION NUMBER __, 2015

**Adoption of 2015 Revised Erie County Act 101 Municipal
Solid Waste Management Plan**

WHEREAS, in accordance with the requirements of the Solid Waste Management Act of 1980 (Act 97) and the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101), Erie County is periodically required to submit to the Pennsylvania Department of Environmental protection an officially adopted municipal waste management plan for municipal waste generated within its boundaries; and

WHEREAS, this revised Municipal Solid Waste Management Plan for the County of Erie has been financed by a grant from the Pennsylvania Department of Environmental Protection and local funds and services provided by the Erie County Recycling Program; and

WHEREAS, upon the recommendations of the Erie County Solid Waste Advisory Committee, the County of Erie County Council have reviewed and approved the recommendations of this proposed plan to insure the availability of adequate permitted processing and disposal capacity for the municipal waste generated within the County of Erie .

NOW THEREFORE, BE IT RESOLVED by the County Council of the County of Erie, that Erie County hereby adopts the revised 2015 Erie County Municipal Solid Waste Management Plan attached hereto as Exhibit A as the official Erie County Municipal Solid Waste Management Plan.

On the motion of _____, seconded by _____, this resolution was passed on this ____ day of _____, 2015 by a vote of __ to __.

APPROVED BY:

Fiore Leone, Chairman
Erie County Council

Kathy Dahlkemper,
County Executive

Date:_____

ATTEST:

Douglas R. Smith
County Clerk

Date:_____

Executed Disposal Capacity Agreements

Please Note:

- In the official hard copy, published version of the Erie County Municipal Solid Waste Management Plan, the executed disposal capacity agreements are inserted behind this cover sheet.
- In copies of the printed published version of the Erie County Municipal Solid Waste Management Plan, the executed disposal capacity agreements are not inserted behind this cover sheet but are available for review at the offices of the Erie Country Department of Planning.
- For the CD-ROM electronic digital version of the plan, the executed disposal capacity agreements are not incorporated into the document, but are provided in a separate folder on the disk.
- For the internet version of the plan, the executed disposal capacity agreements are not incorporated into the document, but are available for review at the offices of the Erie Country Department of Planning.

